

The

CONSTRUCTOR

OFFICIAL PUBLICATION OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA



Volume XXXIV

MARCH 1952

Number 3

● BUILDINGS

● HIGHWAYS

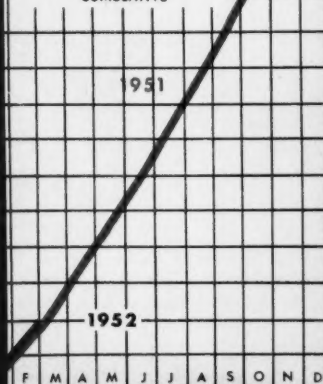
● AIRPORTS

● RAILROADS

● PUBLIC WORKS



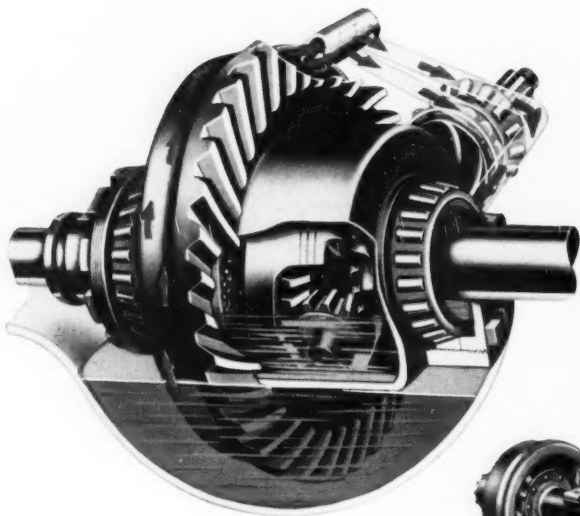
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A.G.C. Survey Shows Planning Slowdown—21

Hearings on Right to Judicial Review—27

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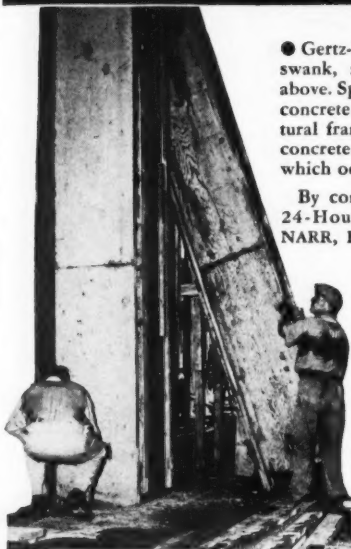
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● Gertz-Flushing, north-shore Long Island's swank, new department store, is shown above. Speed and economy both considered, concrete got the owner's nod for the structural frame of new addition as well as for concrete alterations to the old bus terminal which occupied part of the site.

By concreting throughout with 'INCOR' 24-Hour Cement, FOSS, HALLORAN & NARR, INC., cut form requirements to the bone... top speed with 50% less forms! Stripped in 24 hours, where necessary, dependable 'Incor'* high early strength kept the complicated job on schedule all the way.

Concrete work was completed a week ahead of schedule, making it possible to finish the job and open the store 25 shopping days before Christmas... thanks to concreting know-how and typical performance of America's FIRST high early strength portland cement.

*Reg. U.S. Pat. Off.



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The CONSTRUCTOR

CONTENTS

BUILDINGS • HIGHWAYS • AIRPORTS



RAILROADS • PUBLIC WORKS

GENERAL

A.G.C. Survey Shows Slowdown in Construction and Planning.....	21
Construction Council Surveys Markets and Materials in '52.....	23
NPA Relaxes Self-Authorization Rules.....	24

CONTRACTS • SPECIFICATIONS

A.G.C. Clarifies Issues Involved in Judicial Review Legislation.....	27
Renegotiation Board Extends Filing Time.....	28

LABOR RELATIONS

A.G.C. Hits Steelworkers' Policy Proposal.....	31
Sanctions in Lump-Sum Contracts Tested.....	31

APPRENTICE TRAINING

Deferment Plan for Apprentices Proposed.....	32
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BUILDING

New England Moves to Hold Industries.....	35
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HIGHWAYS • AIRPORTS

Congressional Hearings Begin on Federal-Aid Highway Bills.....	38
Propose Mississippi Parkway Project.....	39

HEAVY • RAILROAD

Long Shield Saves Cofferdam on Dam Site.....	41
Pipelines' Past and Prospects Surveyed.....	42

A. G. C. REPORT

Managing Director's Report to 33rd Convention.....	47
H. E. Foreman	

ACCIDENT PREVENTION

A.G.C. Contractors Win Safety Honors.....	72
Contractor Finds Profit in Job Safety.....	74

ALSO IN THIS ISSUE

News of the Month.....	5
Constructographs.....	7, 9, 11
Consumers' Price Index.....	13
Sidelights for Contractors.....	15
Editorials.....	19
A.G.C. Chapter and Branch Annual Meetings.....	76
A.G.C. Forms and Reports.....	83
New Equipment and Materials.....	96
Advertisers' Products.....	103
Index of Advertisers.....	107

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COVER

The recently completed Henry J. Taylor bridge stretches across the Susquehanna River carrying U. S. Highways 14, 15 and 22 into Harrisburg, the capital city of Pennsylvania. The Booth & Flinn Construction Co., A.G.C., of Pittsburgh built the structure which cost approximately \$4.7 million.

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C.I.T. CORPORATION
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S. D. MADDOCK
PRESIDENT

March, 1952

Dear Friends:

You no doubt are aware that new laws require that 70% of your 1951 Federal Income Tax Bill must be paid by June 15th. This out-go of cash funds comes during the season when most contractors need ample cash resources for purchasing new equipment and for working capital.

You can arrange a program with us now that will do either or both of these things:

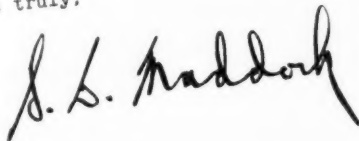
Provide 36 months financing for new equipment purchases.

Provide loans for working capital secured by equipment you now own.

Then, despite the demands for cash for tax payments, you will be ready to handle substantial and profitable jobs this year.

Our people in the offices listed below are ready now to discuss your program with you.

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A.G.C. survey of current conditions in the construction industry shows general contractors are now operating substantially below the record volume year of 1951. Activity throughout the nation is diversified. Building and highway contractors in most areas are relatively idle but contractors working on defense and defense-related projects find work plentiful. In general, all materials but the controlled items—steel, copper and aluminum—are plentiful, but some areas report the controlled metals in good supply and others scarce. Labor is reported abundant in most areas and the general trend of wages slightly upward. Equipment is reported "difficult" with heavy items and repair parts harder to obtain. (Page 21)

A.G.C. 33rd convention, held Feb. 25-28 in Detroit, was considered highly successful by the 1,000 in attendance, representing leading contractors from all parts of the country and Alaska. It was a working convention in which many important matters were deliberated and important actions taken.

New officers for 1952 installed by A.G.C. are Arthur S. Horner, Denver, president, succeeding Glen W. Maxon, Dayton, Ohio; C. P. Street, Charlotte, N. C., vice president; and William Muirhead, Durham, N. C., secretary-treasurer.

A.G.C.'s busiest year in accomplishing productive work relating to controls, regulations, contracting procedures and forms, defense work, legislation and other problems was described succinctly in Managing Director H. E. Foreman's annual report to the convention. (Page 47)

Positive actions taken by the convention include recommendations for: encouragement of advance planning, early relaxation of credit controls on construction, \$810 million annual federal-aid highway authorization, legislation offsetting the Wunderlich Supreme Court decision; realistic consideration of prevailing wage scales and adherence to traditional differentials between major construction classifications in predetermining minimum wages, strict observance of wage stabilization policies by federal agencies performing their own construction; award of general contracts con-

ferring undivided responsibility for the construction, solicitation of bids on the same design rather than alternates, adhering to the traditional practice of choice by the contractor of the surety company for his bonds, continued improvement of accident prevention programs and opposition to federal safety control, settlement of jurisdictional claims between crafts for placing and setting machinery, and re-emphasis of the association's position on contract renegotiation.

The convention opposed encouragement of construction health and welfare funds through exercise of federal powers intended only for purpose of wage stabilization, condemned efforts to ban contract work on steel company properties, and reaffirmed A.G.C.'s position against valley authority legislation. (Page 19; full texts to appear in April *CONSTRUCTOR*)

Testimony on Wunderlich decision was offered last month by A.G.C. Managing Director H. E. Foreman and Legal Counsel John C. Hayes who recommended to the Senate Judiciary Committee that legislation be drafted to offset the effects of the case and to assure contractors review of differences with contracting officers and department heads whose determinations are found to be grossly erroneous or unjust. Supreme Court decision in the Wunderlich case would permit review only when federal officers were guilty of fraud. (Page 27)

NPA has approved commencement of 645 religious, municipal and community projects costing some \$200 million, thus allowing "sufficient time for the necessary planning and preparatory work" to begin before actual allotments of materials are made in latter half of 1952. (Page 22)

Self-authorization of steel for small school, commercial and other non-industrial type buildings will be more than double the current two tons when revised Controlled Materials Plan Reg. 6 is issued; use of foreign steel will be permitted, and floor area or bathrooms as basis for allotments will be discarded. (Page 24)

St. Lawrence Seaway promoters were working hard last month to secure Congressional approval of the project.

Called to testify on construction costs, Lt. Gen. Lewis Pick, chief of Army Engineers, stated that the 27-ft. channel would cost about \$818 million. The U. S. share would be \$567 million.

Federal-aid highway bills were keeping both Senate and House committees busy last month as highway users, contractors and officials offered their knowledge of the needs. The A.A.S.-H.O. asked \$810 million, showing an analyzed need for \$32 billion worth of new roads and improvements. A.G.C. reported that the contracting industry could handle a greater highway program and competition would keep costs down. (Page 38)

Safety-conscious contractors have reduced the severity rate of accidents in the industry, according to records of construction firms participating in the 1951 A.G.C. accident prevention program. The association made 120 honor awards at its 33rd annual convention last month. (Page 72)

Tax benefits for industrial construction will be harder to get from now on, according to the Defense Production Administration. The agency, which has granted \$13.4 billion worth of new defense plant projects, is going to take a "harder look" at future requests for certificates of necessity. The goal of increased industrial capacity is being reached.

Right of sanctions against lump-sum contract prices by government in enforcing wage stabilization regulations was questioned in appeal of Hedin Construction Co. case from findings of regional WSB enforcement commission to national commission. Decision is due early this month after hearing in Washington, Feb. 29, in case alleging violation of an established area rate for bricklayers. (Page 31)

Steelworkers' proposal to ban all contracting of construction, repair and maintenance work around a steel facility has been censured by A.G.C. The union submitted the proposal in hearings last month before the Wage Stabilization Board. (Page 31)

Next year's A.G.C. convention is slated for Miami, Fla., and the following year in Los Angeles, Calif.

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A Series of Graphs Outlining the Construction Trend

Compiled by The Associated General Contractors of America

TREND OF CONSTRUCTION COSTS

The average of construction costs in the principal construction centers of the United States for February stands at Index Number 378, according to the A.G.C. Index. The cost figure for February 1951 was 374. The 1913 average equals 100.

Number 290. The average a year ago stood at 293. The 1913 average, again, equals 100.

CONTRACT AWARDS IN 37 STATES

The volume of contracts awarded during January (Index Number 180, based on 1936-1938) is a decrease of 66 points from December, and a decrease of 30 points from January 1951.

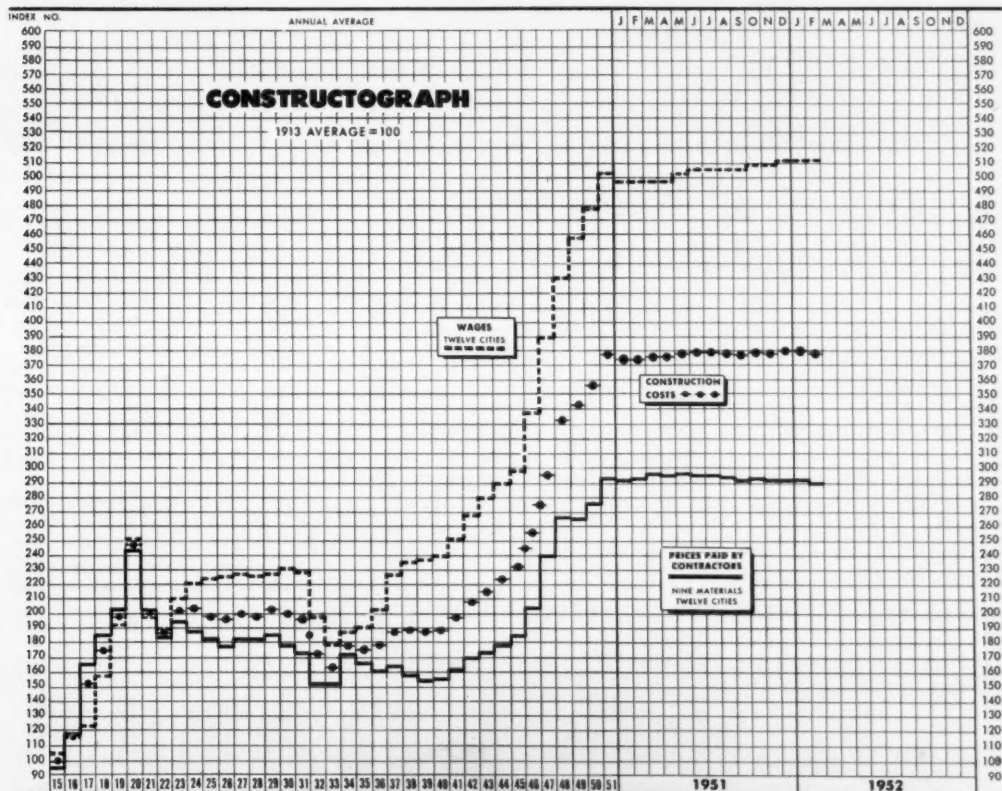
WAGE AND MATERIAL PRICE TRENDS

The average of wages in the principal construction centers of the United States stands at 512 for February. One year ago the average stood at 497. The average prices paid by contractors for basic construction materials for February stand at Index

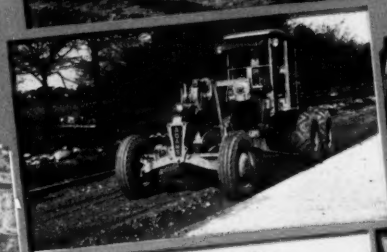
REVENUE FREIGHT LOADINGS

Revenue freight loaded during the first 8 weeks of 1952 totaled 5,714,026 cars. For the same period in 1951, loadings amounted to 5,709,134 cars. This represents an increase of less than 1%.

● Wage, Material Price and Construction Cost Trends



Users from Coast to Coast Praise the Adams No. 610



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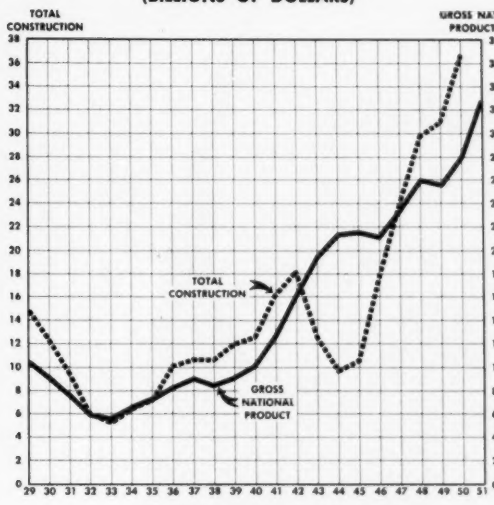
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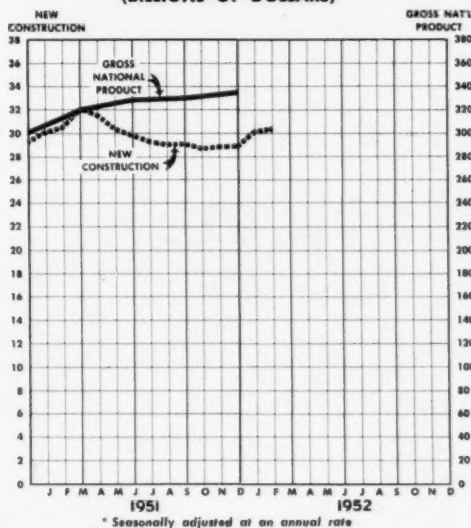
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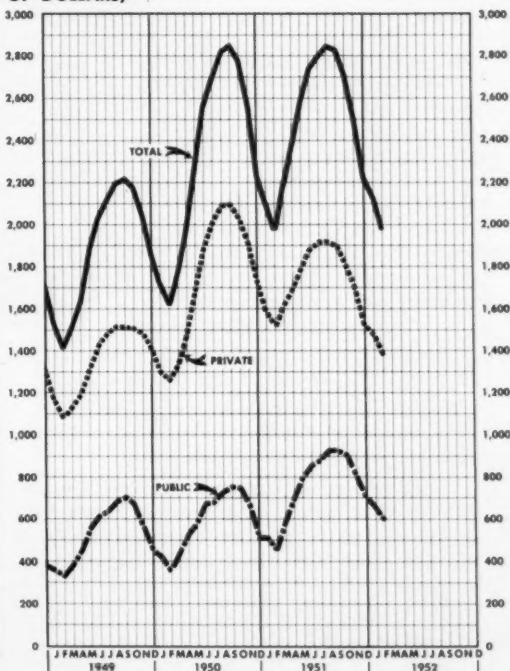
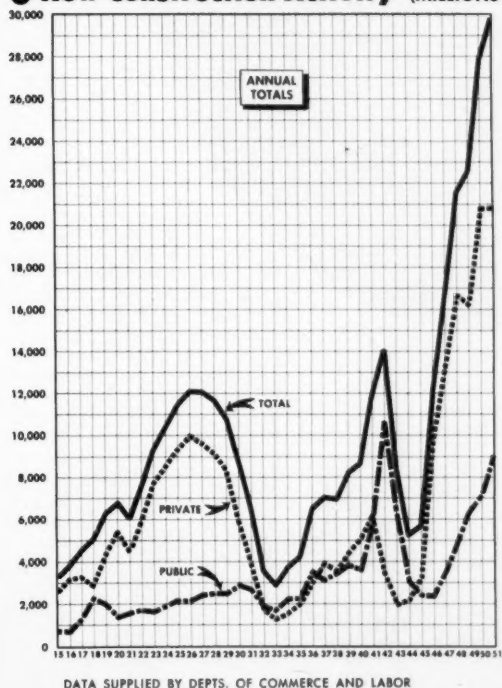
● **TOTAL Construction compared with Gross National Product**
(BILLIONS OF DOLLARS)



● **NEW Construction compared with Gross National Product***
(BILLIONS OF DOLLARS)



● **New Construction Activity** (MILLIONS OF DOLLARS)





Architect Giná of Ketchum, Giná & Sharp

says:

"The unique design of this modern shopping center offered special roofing problems...

we met them all with
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The new Jordan Marsh Company shopping center is a modern architectural masterpiece... with a roofing installation of exceptional efficiency. Here, Truscon Ferrobord Roofdeck supplied a lightweight roof of high structural strength... and one that permitted easy conformation to the distinctive building design.

Truscon Ferrobord is adaptable to flat, pitched or curved roofs.

The 6" wide units are so designed and formed that each firmly interlocks with the adjoining unit along the entire length, achieving the maximum in lateral distribution of concentrated loadings.

See SWEET's for complete details on Truscon Ferrobord Roofdeck; and write for detailed literature on all other Truscon Steel Building Products. Truscon Steel Company, 1100 Albert Street, Youngstown 1, Ohio.

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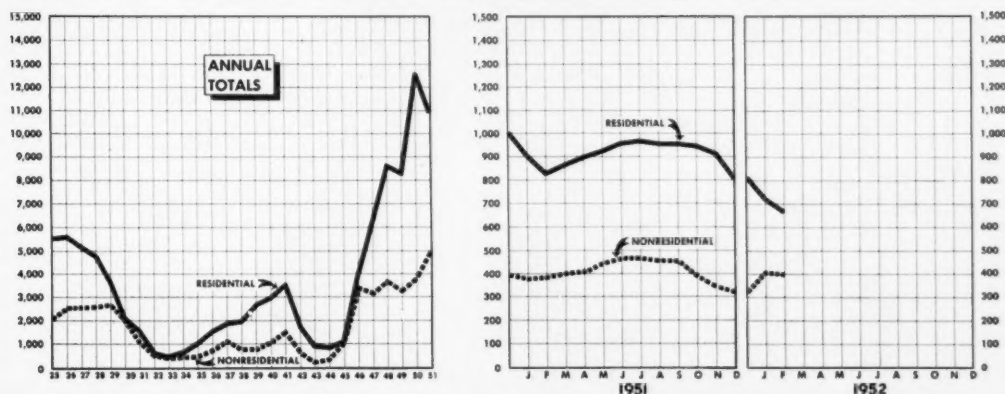


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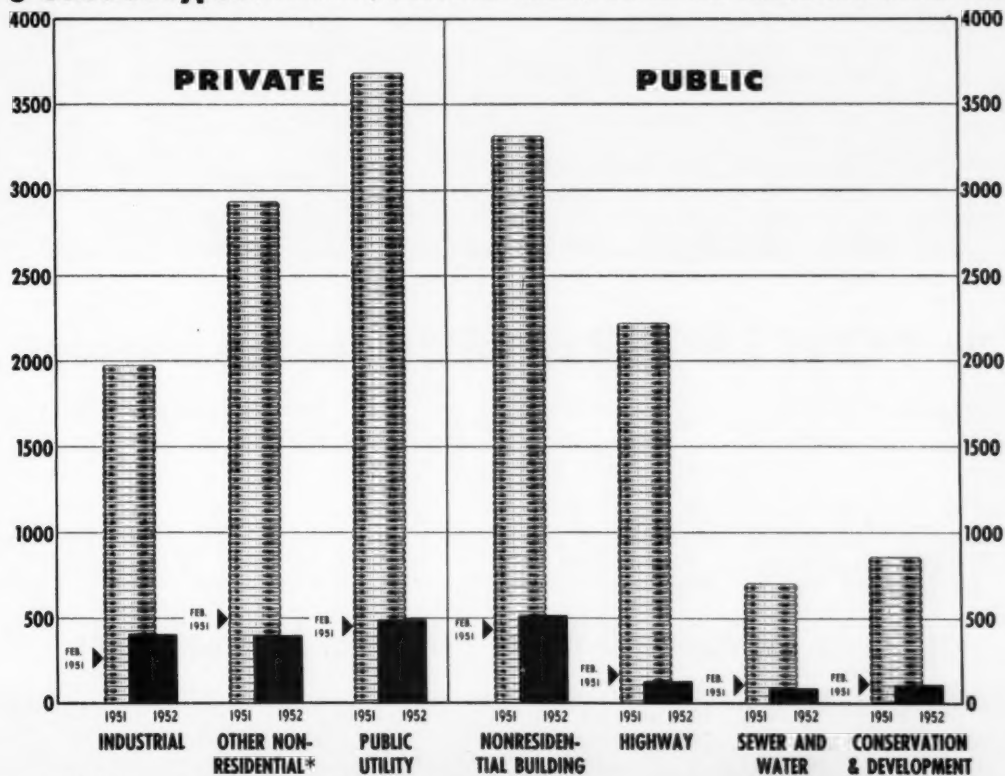
NEW CONSTRUCTION ACTIVITY

● Private Residential and Nonresidential Building* (MILLIONS OF DOLLARS)



* Residential excludes farm; Nonresidential includes industrial, commercial, institutional, and social and recreational building, but excludes public utility building.

● Selected Types:(CUMULATIVE, MILLIONS OF DOLLARS) 1951 and 1952 VOLUME THROUGH FEBRUARY



*Includes commercial, institutional, and social and recreational building

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CONSTRUCTION EQUIPMENT

For Moderate Income Families in Large Cities

(Formerly referred to as the "Cost of Living Index," compiled by the Bureau of Labor Statistics)

This table indicates the average changes in retail prices of selected goods, rents and services bought by the average family of moderate income from November 15, 1949 to January 15, 1952.

They are presented here for use by employers who may wish to take these cost of living data into consideration when contemplating adjustments of wages based on increased living costs.

The Bureau of Labor Statistics surveys 10 key cities every month and 24 other large cities quarterly. Prices are obtained on food, fuel, apparel, house furnishings and miscellaneous goods and services. Rental information is obtained quarterly only for all cities. The computations are based on the indexes for the years 1935-39, which are taken as the average of 100 points.

	1949			1950			1951			1952		
	NOV. 15	DEC. 15	JAN. 15	NOV. 15	DEC. 15	JAN. 15	NOV. 15	DEC. 15	JAN. 15	NOV. 15	DEC. 15	JAN. 15
Average.....	168.6	167.5	166.9	175.6	178.4	181.5	188.6	189.1	189.1	188.6	189.1	189.1
Birmingham, Ala.....	170.5	168.4	166.9	180.3	184.0	188.2	196.3	196.0	194.7	196.3	196.0	194.7
Mobile, Ala.....		167.4			176.6			187.3			187.3	
Los Angeles, Calif.....	166.6	165.4	166.9	173.2	175.8	181.3	189.6	190.4	190.0	189.6	190.4	190.0
San Francisco, Calif.....		171.5			182.8			193.1			193.1	
Denver, Colo.....			164.5			184.9			192.3			192.3
Washington, D. C.....	166.2			171.9			184.7			184.7		
Jacksonville, Fla.....		175.5			186.5			195.9			195.9	
Atlanta, Ga.....	170.5			178.9			196.1			196.1		
Savannah, Ga.....			169.1			189.2			200.3			200.3
Chicago, Ill.....	175.3	173.2	172.3	180.6	184.1	185.4	194.3	194.2	194.1	194.3	194.2	194.1
Indianapolis, Ind.....			170.6			184.4			190.9			190.9
New Orleans, La.....	173.3			178.5			190.0			190.0		
Portland, Me.....		162.8			171.4			179.9			179.9	
Baltimore, Md.....		170.9			180.7			193.3			193.3	
Boston, Mass.....	164.0	162.7	161.5	169.6	171.2	173.5	180.0	180.9	180.0	180.0	180.9	180.0
Detroit, Mich.....	169.8	169.1	168.5	179.2	181.0	184.2	191.5	191.9	192.0	191.5	191.9	192.0
Minneapolis, Minn.....		167.4			178.8			187.7			187.7	
Kansas City, Mo.....			160.6			175.6			182.3			182.3
St. Louis, Mo.....		167.8			180.2			190.2			190.2	
Manchester, N. H.....			167.1			180.6			187.0			187.0
Buffalo, N. Y.....			164.8			180.8			188.3			188.3
New York, N. Y.....	165.8	164.9	163.7	172.1	175.1	177.8	184.1	184.0	184.2	184.1	184.0	184.2
Cincinnati, Ohio.....	168.3	167.8	167.7	176.0	178.7	182.3	187.8	187.9	188.3	187.8	187.9	188.3
Cleveland, Ohio.....	170.3			178.6			192.0			192.0		
Portland, Ore.....			173.8			190.4			199.0			199.0
Philadelphia, Pa.....	168.6	167.3	165.9	174.1	178.2	181.0	189.1	189.2	188.9	189.1	189.2	188.9
Pittsburgh, Pa.....	171.3	170.3	169.9	178.9	180.8	183.4	192.0	191.7	192.2	192.0	191.7	192.2
Scranton, Pa.....	166.3			173.7			185.4			185.4		
Memphis, Tenn.....		170.8			180.2			191.4			191.4	
Houston, Tex.....	173.3	173.2	172.8	191.1	184.8	190.1	195.1	196.0	195.4	195.1	196.0	195.4
Norfolk, Va.....	168.2			177.0			191.7			191.7		
Richmond, Va.....			161.8			179.8			183.8			183.8
Seattle, Wash.....	171.6			180.8			194.6			194.6		
Milwaukee, Wis.....	168.4			179.1			195.3			195.3		

Precision Action

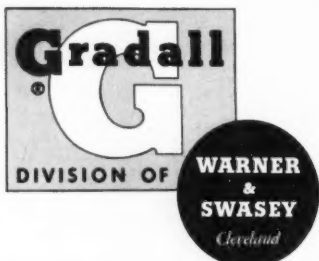
CLEANS DITCH BOTTOM WITHOUT DESTROYING SODDED SLOPES!

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The Gradall's remarkable precision, versatility, and maneuverability return big profits to construction men—cut costs for railroads and municipalities.



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The 6 ft. wide, ½ cubic yard bucket starts its precision cut.



The hydraulic boom, working with the skill of a giant arm, takes a skim cut from the bottom of the back slope. The muck is cleaned from the bottom, and a skim cut taken from the lower end of the front slope—lifting it free without disturbing sod.



The Gradall swings around and wastes the muck.



The arm-action boom levels the waste evenly over the surface before returning for another cut.

GRADALL—THE MULTI-PURPOSE CONSTRUCTION MACHINE *with Controlled Down Pressure*

Sidelights for Contractors

By John C. Hayes, Legal Adviser

Taxes

Bureau of Internal Revenue.—The House has approved the President's plan for reorganization of the Bureau, whereunder the present 64 collectors would be replaced by not more than 25 district commissioners. All Bureau personnel, other than the commissioner, would be placed under civil service. In addition, a bill has been introduced in the Senate to prohibit Bureau officers and employees from engaging in any other business or employment.

Voluntary Disclosures.—The Treasury Department has announced that it has abandoned its long established policy to refrain from recommending criminal prosecution where taxpayers make voluntary disclosure of intentional tax evasion prior to the initiation of an investigation by the Bureau of Internal Revenue. Present policy of the Treasury is stated as recommending criminal prosecution in every case where the facts and circumstances warrant that action. Also, the Treasury has announced that it no longer will adhere to its former practice of not recommending criminal prosecution where it might endanger the health or sanity of a defendant.

Diesel Fuel Oil Tax.—Effective November 1, 1951, there was imposed a federal excise tax of 2 cents per gallon on diesel fuel for use in any diesel-powered "highway vehicle." The Bureau of Internal Revenue has not yet issued any regulations or rulings on the application of this tax; but it advises informally that it considers the tax applicable to fuel for diesel trucks, since they are essentially highway vehicles although used elsewhere in some instances, but that bulldozers, scrapers, steam shovels, and similar pieces of construction equipment are not regarded as highway vehicles within the coverage of this tax.

Unlike the diesel fuel oil tax, the older federal excise tax of 2 cents per gallon on gasoline is applicable to practically all sales of "gasoline" as that commodity is therein defined. Exemption is provided only for benzol, benzene, and naphtha sold for

use otherwise than as a fuel for the propulsion of "motor vehicles," motor boats, or airplanes, and for all sales of kerosene, gas oil, and fuel oil.

State Property Tax.—The Supreme Court has upset an Ohio personal property tax levied upon the full value of boats and barges owned by an Ohio corporation but which were almost continuously outside of Ohio during the taxable year. Since the boats and barges were operating in other inland waters and could be taxed by several states on an apportionment basis, the court felt that the attempt by the state of their domicile to tax their full value violated the due process clause of the Fourteenth Amendment.

Depreciation.—Both the House Ways and Means Committee and the Senate Finance Committee have reported favorably upon a bill to provide that the basis of property shall be adjusted by the amount of depreciation previously allowable, or by depreciation previously allowed, if that was more than the amount allowable, but only to the extent that the deduction of the excess amount reduced income or excess profits taxes in any year. The bill would remedy the hardship caused by the Supreme Court decision of some years ago in the *Virginian Hotel* case which required a taxpayer claiming excessive depreciation in past closed years to reduce his remaining basis by the total amount of such depreciation claimed although it had resulted in no tax benefit to him.

Retroactive Pay Increase.—The Bureau of Internal Revenue has held that employers who applied to the Salary Stabilization Board last year for permission to increase 1951 pay of employees can claim deductions on their 1951 tax returns for such increases or bonuses although not approved by the Stabilization Board or paid to the employees until this year. While a cash basis employee should include such back pay in his 1952 income tax return, he may compute the tax thereon as though he were reporting it in 1951, provided such pay exceeds 15% of his 1952 gross income,

Public Contracts

Termination of Contracts.—The Department of Defense has issued rules governing the termination of military contracts. The rules are applicable to contracts entered into on or after March 1, 1952; they state that cost factors to be considered include direct costs such as materials, labor, and other direct costs, as well as designated indirect costs; and settlements made thereunder are subject to review by the General Accounting Office.

Increased Labor Costs.—Where a lump-sum government contractor increased wages after the Wage Adjustment Board had approved wage increases for construction workers in the area, and there was no provision in the contract for extra compensation, the Court of Claims denied the contractor's suit for recovery of the extra expense from the government. The court distinguished its earlier decision in the *Sunswick* case, where recovery had been allowed, by pointing out that in the *Sunswick* case the contractor had throughout disputed a union's demands, the controversy had been settled only after a full hearing before the Wage Adjustment Board, and that the contractor had been required to pay the increased wages ordered by the Board or incur penalties for refusal.

Contract Records.—Since World War II hostilities were declared ended by the President on December 31, 1946, and the Contract Settlement Act of 1944 required that records of World War II contracts be kept only for 5 years from the date of settlement or termination of hostilities, whichever was later, the General Services Administration has announced that records of any contract completed or settled before December 31, 1946, can now be destroyed. Records of any such contract settled after December 31, 1946, can be destroyed 5 years after the settlement date thereof. This announcement, of course, has no bearing upon any need the contractor may have for longer retention of contract records for his own tax purposes.

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DAILY GREASING PERIODS ELIMINATED. You save at least 30 minutes every day . . . gain about one full month's production every year.

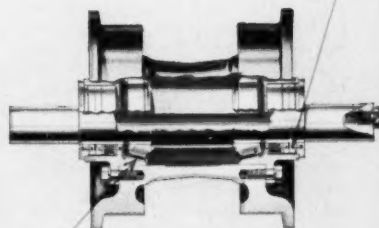
FULL PROTECTION ASSURED. Positive Seals keep grease in . . . dirt and moisture out. 1000-Hour Lubrication gives you protection unchallenged in the tractor field.

SAVES ON GREASE. Truck wheels, idlers and support rollers are grease-filled at the factory . . . need new grease only once every 1000 hours!

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TRACTOR DIVISION • MILWAUKEE 1, U. S. A.



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sity for avoiding an arbitrary diet and feeding the individual what is best for his proper development.

Fortunately, the diet provided by air-entraining cement develops enough fat for most concrete mixes to "get by," but only by studying each set of conditions and furnishing just the right diet of air-entraining agent can the best results be obtained from any concrete mixture. The excellent results obtained are well worth the effort. If, however, you are *certain* the conditions are right for using a manufactured air-entraining cement, there's none better than Marquette Air-Entraining Cement.

If you have any problems or questions on the use and mixing of air entrained concrete, the Marquette Service Engineer will be glad to help and advise you—contact any Marquette office.



Correct air entrainment prevents the kind of deterioration shown on this pavement slab. Always be sure your mix will produce the air-entrained concrete the job requires.



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General Contractors State Position

AT THE CLOSE of the 33rd annual convention of The Associated General Contractors of America in Detroit late last month, the conclusions of the 1,000 in attendance could be crystallized as follows:

- General contractors fully recognize that their responsibilities during the mobilization program are:

- To construct the projects which are necessary to the national defense with all possible speed and economy.

- To construct with necessary speed and with efficiency the hundreds of different types of projects which are necessary for the expansion of the nation's productive capacity and essential civilian activities.

- To continue furnishing to the armed services men for reserve construction units who are fitted by their civilian employment to their military activities when they are called to active duty.

- To assist their respective communities in preparing for civil defense in case of need.

- To continue to seek adherence to the principles of the American way of life which best serves the American people.

- The men attending the convention are able to report to the public that the general contracting industry has the capacity to perform all necessary construction promptly and efficiently.

- General contractors at the convention gave study to the particular problems which could influence the productive capacity of the industry, and recommended positive steps so that the industry could serve the nation most effectively.

THE CONVENTION, by resolutions, expressed the following policies:

- That government controls over construction activity be relaxed and abolished as soon as possible consistent with national defense needs, and that government intentions to remove controls be announced in advance to encourage the advance planning of needed projects.

- That credit controls be relaxed as soon as possible over commercial, multi-story and single-family housing projects.

- That Congress adopt the recommendation of the American Association of State Highway Officials of a federal-aid highway authorization of \$810 million for each of the fiscal years 1954 and 1955 as the minimum essential to prevent further deterioration of the highway system.

- That Congress enact legislation conferring on the courts jurisdiction to review any decision by a contracting officer or head of a federal department that is unreasonable or unjust, or not supported by substantial evidence; and further, that any provision in any contract with the United States abridging the rights of the parties thereto to court review be declared null and void; and that contractors' suits now pending in the courts which have not been finally adjudicated be safeguarded in this legislation.

- That in order to safeguard the best interests of government agencies and the public, the Renegotiation Board

adopt policies which will exempt classes of construction contracts not directly or immediately related to the national defense, to be performed outside the continental United States or in Alaska, and to be awarded as the result of competitive bidding after public advertisement; that contractors be permitted the option of how to be renegotiated, and that equitable treatment be given to partners of joint ventures.

- That general contractors express vigorous opposition to actions by any federal agency which help to promote the establishment of health and welfare funds in construction through the exercise of powers intended only for the purpose of wage stabilization.

- That the predetermination of minimum wages for federal projects maintain the historic differentials which have been recognized between building construction and heavy and highway construction; and that realistic consideration be given to the wage scales actually prevailing in the locality.

- That day labor operations of federal agencies are condemned, but when they are undertaken the same policies of wage stabilization should be observed as are required of the construction industry.

- That the Wage Stabilization Board reject the proposal of the steelworkers' union of prohibiting contracting-out of construction, maintenance and repair work because it has the same effect as an illegal combination of union and employer in restraint of trade; an illegal boycott of the products and services of the construction industry; and an illegal closed-shop condition for an uncertified union.

- That the A.F.L. Building and Construction Trades Department and constituent unions should reconcile jurisdictional claims so that future stoppages of work can be avoided in the placing and setting of machinery and equipment.

- That public and private agencies should award a single contract for construction of a project to a competent general contractor because maximum value is secured when undivided responsibility is placed upon that organization.

- The policies of soliciting bids for construction with alternate designs submitted by the bidder be abandoned and that all bids should be solicited on the same design to insure maximum competition on the design best suited to needs of the owner, to avoid possibilities of favoritism, and to continue traditional practices of the industry.

- That emphatic disapproval is expressed of any departure from the traditional practice of permitting the general contractor to secure the surety bonds for performance of the work from the responsible company of his choosing.

- That opposition is again expressed to valley authority type of legislation which constitutes a dangerous departure from our constitutional and democratic form of government.

- That members continue to improve their planned programs of accident prevention, and that opposition is voiced to legislation by Congress for federal supervision of industrial safety regulations.



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» **TAPERING** off from the tempo of its record volume year of 1951, the nation's construction industry now is operating substantially below capacity and expects this situation to accentuate during the first half of 1952.

A slowing down of new projects on the planning boards due to hesitancy of owners to plan in the face of uncertainties over controls presages a progressive idleness, particularly in commercial and institutional building and highway construction, as current work is completed.

A "spotty" situation now exists in total activity, due to construction controls, with some areas busy on defense-related projects and others approaching almost complete idleness.

Many projects—especially buildings and major highway and bridge structures—considered urgent to their communities are not able to proceed.

In general, construction materials other than the controlled items—steel, copper and aluminum—are abundant. There is considerable dislocation in the distribution of these controlled metals themselves, with steel reported plentiful in some areas and scarce in others.

The labor supply is adequate in most areas, with idleness reported in some localities. The over-all wage trend is slightly upward.

Some difficulties are reported in obtaining equipment, with heavy items in "tight" supply, and repair parts harder to obtain.

These are the salient points in a survey of current conditions and prospects for the first half of 1952 conducted by The Associated General Contractors of America for study at its 33rd annual convention February 25-28 in Detroit.

The survey was conducted among the A.G.C.'s 118 affiliated chapters and branches, and among its directors, located throughout the United States and Alaska. These sources represent more than 6,100 leading firms which annually perform the bulk of the nation's contract construction.

Members of the association engage in all types of work such as industrial, commercial, institutional and residential building; highway, street and airport construction and other types of earthmoving and paving operations; and heavy engineering types such as dams, waterworks and sewers, pipelines, dredging, canals and bridges and docks.

The association had under study the problems faced by the industry in an era when record demands for

A.G.C. Survey Shows Slowdown In Construction and Planning

- Owners Hesitate to Plan in Face of Federal Curbs
- Building, Highways Hit Hardest by Controls
- Many Urgent Projects Stymied; Activity "Spotty"

civilian construction of all types are vying with an expanding defense program for critical materials. Last year saw construction volume rise to a record-breaking \$39 billion, making it the nation's most productive single industry.

Planning Dearth Would Mean Lag

Respondents to the survey reporting inadequate advance planning for future work indicated that uncertainties arising from the administration of construction controls are resulting in hesitancy on the part of awarding authorities and investors in construction to place their projects in the planning stage.

The survey reflects the need for definite commitments of controlled materials for use at some future time on projects in the planning stage, for notice of when materials will be available for types of projects now postponed, and for project approvals to imply that allocations will be made for all materials as they can be used, giving assurance that the projects can be completed.

A general halt in advance planning would mean a serious lag in getting construction under way once the projects are permitted to go ahead, resulting in unemployment during the period between commencement of architects' plans and the start of construction.

The National Picture

The survey shows that the general contracting industry is pervaded by confusion over materials controls and by uncertainties as to the volume of work in the future. The pinch of controls is being felt to an increasing degree.

The preponderance of opinions offered for improvement of conditions related to government controls—that they should be modified or eliminated entirely. Many expressed the opinion that the controls on materials were not realistic.

Specific results of the tabulation

of replies from the association's building, highway and heavy construction chapters, considered together, are as follows for the first half of 1952:

Construction Activity: 51 per cent report that members are generally busy and expect to continue active, but many replies indicate that present activity is due to carry-over work with none in prospect when completed. 49 per cent report members are not busy, including the majority of builders surveyed.

Urgent projects: 62 per cent report that urgent projects—especially those connected with defense—are able to go ahead. In the 38 per cent reporting otherwise are half the building contractors.

Labor: 85 per cent report an adequate labor supply, 15 per cent inadequate. 82 per cent report a slight upward trend in wages, with 18 per cent reporting stabilization.

Materials: 40 per cent report adequate materials are available, 60 per cent otherwise. However, the answers given indicate that the negative answer pertained mostly to controlled materials, with many returns indicating that all other materials are in good supply. Some report controlled materials plentiful but projects not approved. In the group reporting shortages of controlled materials were most of the highway contractors surveyed.

Equipment: 65 per cent report equipment is available, 35 per cent report shortage, principally in heavy items.

Repair Parts: 63 per cent report repair parts for construction machinery are available, 37 per cent negative. Less than half the highway contractors surveyed report repair parts available.

Advance planning: Only 46 per cent of the replies consider advance planning for future work to be adequate, with almost two-thirds of the builders terming it inadequate. In the heavy construction category, however, 74 per cent of the returns report planning is adequate.

Compared with Previous Survey

Compared with the association's survey of a year ago, this appraisal finds contractors substantially less busy, and labor and materials (with the exception of controlled items) more abundant.

Equipment supply also appears to be better, but tightening.

While the question was not asked, a number of replies offer the information that competition is keen for the fewer projects being awarded.

Less work in general appears to be coming on the market, and general contractors appear to be more concerned with the future, especially in view of the apparent psychological impact of controls on advance planning.

As was the case last year, wide variations were found in the conditions in various areas of the country, and between the different types of general contractors.

Comparison of Types

The impact of controls appears to be heaviest on building construction, with highways next. More rigid controls have been placed on several building types, such as commercial and institutional.

Less activity and more apprehension is noted among building contractors, and their types of projects are suffering more from the lack of advance planning.

Fewer urgent building projects are able to proceed than in the highway and heavy classifications.

While labor is reported adequate by the majority of returns, more builders report a good supply than the other two divisions, obviously because of less activity.

In the materials field, more builders report an adequate supply than the others, also presumably because there is less building activity. In highway work, however, only 9 per cent report enough materials, with these contractors suffering badly from a lack of steel. A shortage of materials also is reported by the heavy contractors, with only 42 per cent of these surveyed terming the supply adequate.

Slightly more than half the highway and heavy contractors report equipment available, with less than half terming repair parts readily available. These contractors are the major users of heavy construction equipment. The majority of the builders, who have relatively less requirements for equipment, report it adequate.

A constant factor that should be included in a proper analysis of this survey is the fact that the construction industry is now in its slack season.

Following is the breakdown of replies by the three classifications:

Building Construction

Construction activity: 41 per cent report members are and will be busy, and 59 per cent otherwise.

Urgent projects: 50 per cent say urgent projects are able to go ahead.

Labor: 90 per cent report the supply is adequate, 10 per cent report negative.

Materials: 51 per cent report an adequate supply, 49 per cent report shortages.

Equipment: 73 per cent report equipment is available, 27 per cent otherwise.

Repair parts: 74 per cent say repair parts are available, while 26 per cent indicate difficulties.

Advance planning: Only 35 per cent report adequate advance planning for future work, while 65 per cent report otherwise.

Highway Construction

Construction activity: 66 per cent report members are and will be busy during the first six months of 1952, the remainder not busy.

Urgent projects: 77 per cent say urgent projects are able to proceed while the other 23 per cent report difficulties.

Labor: 79 per cent report adequate.

Materials: 9 per cent report required materials available, and 91 per cent report supply inadequate, with steel mentioned most.

Equipment: 52 per cent report equipment available.

Repair parts: Only 46 per cent say parts are readily available.

Advance planning: 55 per cent say planning is adequate, 45 per cent report inadequate.

Heavy Construction

Construction activity: 67 per cent report members are and will be busy.

Urgent projects: 83 per cent say urgent jobs can go ahead.

Labor: 75 per cent report adequate. Materials: Only 42 per cent report they are available.

Equipment: 58 per cent report equipment available.

Repair parts: 50 per cent say repair parts are available.

Advance planning: 74 per cent report planning is adequate.

First Break in Controls

The National Production Authority late last month announced that it had approved 645 religious, municipal, and community building projects all over the country for immediate commencement.

The projects, which would cost an estimated \$200 million, will receive materials allotments in the latter half of 1952 and first quarter of 1953, the agency said. It was called the first major break in the tight construction controls.

"This action was taken," Administrator Henry H. Fowler said, "in line with our previously stated policy of issuing authorizations now for the construction of certain selected categories of public welfare and safety projects in order to allow sufficient time for the necessary planning and preparatory work."

The agency has been under fire by construction industry representatives who have been predicting an unemployment lapse late in 1952 unless advance planning for projects, then being denied, were encouraged.

Although the materials will not be allotted until the third quarter, the authorizations have been issued "to permit immediate start of preliminary construction such as excavations and footings."

Idle Steel Plants Seen

An appeal to the Defense Production Administration to encourage more advance planning of construction projects has been made by the American Institute of Steel Construction.

"Serious unemployment and a substantial amount of idle plant capacity faces the structural steel fabricating industry by early summer if present government restrictions continue," the institute declared last month.

The steel men also asked that DPA increase the tonnage of structural steel for industrial and commercial use which can be self-authorized. They reported that although the industry's backlog is high, "less than half of this tonnage carries any authorization to proceed with fabrication and construction."

(Since the fabricators made these recommendations, action has been taken by the agency to meet both of them.)

» REPRESENTATIVES from every phase of the construction industry gathered in Washington, D. C., last month to survey their common problems at the midpoint of the rearmament program and to appraise both the markets and materials outlook in 1952.

The Construction Industry Advisory Council, sponsored by the Chamber of Commerce, heard Charles E. Wilson, director of defense mobilization, predict that non-industrial building would be curbed for "maybe another year." The former president of General Electric said he knew the demand for more schools, roads and bridges was building up every month, but much defense expansion must be completed before the materials shortage would be eased.

Sees Defense Production Peak

Mr. Wilson told the assembly of contractors, building materials manufacturers, labor union leaders, and other construction industry representatives that the defense production peak would be reached this year and then level off at about \$50 billion annually. After that, he opined, more materials could be diverted to construction.

In other sessions during the all-day parley, speakers outlined the construction markets in 1952, the need for advance planning and probable trends in critical materials supply.

Norman P. Mason, chairman of the Chamber of Commerce Construction and Civil Development Department Committee, forecast a total volume this year of "between a low of \$25 billion and a high of \$28½ billion." That "fairly narrow range of probability . . . indicates a remarkable stability of activity," he said, "especially considering the violence of the influences which we have to deal with."

He pointed out that a recent survey by the American Institute of Architects revealed that plans are now under way in sufficient volume to support a "general optimistic outlook" for 1952 and early 1953.

However, while the prospects for a high total volume were good, Mr. Mason asserted that certain types of construction would suffer in 1952 and housebuilding would be the hardest hit of those types. Commercial building could be expected to drop off 20% as only those projects now under way would be allowed materials and religious and recreational projects would

Construction Council Surveys Markets and Materials in '52

- See Tough Year Ahead—Then a Bright Future
- Advance Planning Urged Now for Freer Building in '53

be few. Hospital and school building would be good again this year, as would farm building, he predicted. Local public works such as administration buildings, courthouses and jails would drop sharply and highways would fall off slightly. Construction for the military and Atomic Energy Commission would boom, according to Mr. Norman.

"Most of our problems are short-term ones," he declared, "and we can look ahead to a future which is more rosy-hued."

A more sober note was struck by Norman J. Schlossman, Chicago architect, who warned that there would be slack times in 1953 unless planning for future buildings begins now. "Our present difficulties are nothing compared to the difficulties we shall confront when mobilization ends," he contended. Pointing out the constructive steps in planning taken by such cities as Chicago, Philadelphia and Pittsburgh, the architect urged that the industry encourage such programming of public works in every section of the country.

Advance Planning Urged

Bertram D. Tallamy, New York State superintendent of public works and president of the American Association of State Highway Officials, seconded the appeal of Mr. Schlossman to promote more advance planning. "You leaders in the construction industry . . . should protect the private enterprise system by helping to anticipate and solve these problems. We have a responsibility to our country to . . . not let its physical plant run down at the heels."

Representing labor at the council meeting, Richard J. Gray, president of the A. F. L. Building and Construction Trades Department, censured the federal government for usurping functions of free enterprise and called for a "mutual assistance pact between top labor and top management." Such a combination could force moderation in government controls, he believed.

Frank R. Creedon, assistant administrator of National Production Au-

thority, reported recent actions of NPA after counseling with the Construction Industry Advisory Committee.

Creedon Tells NPA Action

All industrial and commercial projects given allotments to start construction in the first quarter of 1952 would be given materials to complete the projects in subsequent quarters, Mr. Creedon said. Furthermore, a study now under way to determine outstanding material needs of current projects will be finished before the committee's next meeting and should reveal what amounts of critical metals will be available in future quarters. The committee asked in its last meeting that no further restrictions be imposed in the use of structural steel in commercial building. It also recommended that the use of foreign and salvage steel be permitted without specific NPA approval.

A panel of six experts in their respective fields briefed the council on the materials outlook for 1952. The anticipated supplies of steel, copper, and aluminum were reviewed.

Henry J. Stetina of the American Institute of Steel Construction supposed that structural shapes would be "in tight supply for many months to come, perhaps throughout the year." He said the trend toward military and industrial construction would take much steel which would make the need "even greater than it was last year."

Steel Fabricators Catch Up

He stressed the point, however, that steel fabricators are already lopping off their backlog of orders and many smaller firms are "clamoring for work in the months that are immediately ahead."

T. E. Veltfort, manager, Copper and Brass Research Association, told the assembly that the current copper shortage is the result of depleted inventories and decreased imports in 1951 as well as labor and price difficulties in the industry. He held out hope that another 100,000 tons annually can be produced above present

NPA Relaxes Self-Authorization Rules

• Picks Up Industry Recommendations on Foreign Steel, Also

» A NUMBER of recommendations recently offered by the Construction Industry Advisory Committee to the National Production Authority will be included in newly revised CMP Regulation 6, the agency reported late last month, and other suggestions are under consideration.

One provision in the proposed regulation will more than double the amount of steel automatically permitted in the construction of small commercial, school and other non-industrial type buildings. Although presently allowed to self-authorize two tons of steel (including structural steel), builders will now be allowed to self-authorize five tons (not to include more than two tons of structural steel or any wide-flange beams).

Use of Foreign Steel

The new regulations will also allow use of foreign steel, a specific recommendation of the industry advisory committee and will forsake the use of floor area or number of bathrooms as a basis for materials allotments. NPA told the builders that the only further restriction on housing in the new order will be a cut of 25 pounds in the amount of copper that may be self-authorized in one-family houses using copper water distribution systems. The allowance will now be only 135 pounds.

Other provisions of the order will allow use of aluminum in place of copper for wiring on a ratio of one

pound of aluminum to two pounds of copper. For housing using sheet metal ducts for heat distribution, the use of an additional 500 pounds of steel will be permitted. Foreign or salvage steel in addition to amount self-authorized may be utilized (if its use does not involve need for additional quantities of copper or aluminum). Houses using electrical energy heating systems will be permitted use of an additional 15 pounds of copper per unit.

NPA has agreed to accept other of the committee's recommendations, most of which would make the language of the regulations clearer to the construction industry.

Earlier last month, the Construction Industry Advisory Committee was told that all industrial expansion and commercial projects which were allowed starting materials this quarter will be kept supplied until completion.

Commercial Allotment Up

The agency also said that the second quarter allotment for commercial building had been upped from 213,000 to 265,000 tons.

A study is now under way, NPA reported, to determine materials requirements for military and Atomic Energy Commission construction in the last half of 1952. After its completion, the agency believes it will be in a position to decide what other projects may be permitted to go ahead with preliminary planning.

blamed reduced imports, a scrap shortage, production difficulties and government stockpiling for the present critical condition in that metal. He called the short-range outlook bleak but the long-range prospects bright. Recently authorized expansion in the field will raise production capacity to over three billion pounds a year—nine times the nation's pre-World War II capacity. If the trend of military requirements does not turn upward, civilian demand may get relief by the fourth quarter 1952, he said.

Representing the "B" product manufacturer, D. D. Couch of American Radiator & Standard Sanitary Corp. told the construction industry representatives that his industry's greatest

Council's Recommendations

The Construction Industry Advisory Council has recommended that the Defense Production Administration establish in the agency "clearly defined responsibility for the handling of construction problems" and examine discrepancies between government and industry reports on the availability of critical materials. It asked better screening of quarterly requirements (both civilian and military) and more consideration of emergency problems in the industry, such as unemployment in certain areas.

The resolution further urged conservation measures in both public and private building and advance planning of needed construction projects to be begun when materials become available. In addition, the council recommended that any allocation of materials for a specific project would carry with it the assurance that critical materials would continue to be supplied in subsequent quarters.

problems were "copper and controls." Builders will have difficulty obtaining plumbers' brass goods, brass pipe and copper tubing for water pipes. The controlled materials plan is partly to blame for production bottlenecks, he declared, and price controls on foreign copper aggravate an already serious supply problem.

Leonard G. Haeger of the National Association of Home Builders explained the process of self-certification and pressed for more freedom in its application. He felt it was a satisfactory solution for small projects.

BRAB Studies Conservation

The construction industry council heard William H. Scheick, director of the Building Research Advisory Board, describe a conservation study the board is conducting. By examining the technical standards that govern building design and construction and by investigating building practices, B.R.A.B. hopes to turn up ways of saving critical materials and eliminating waste.

The study is already showing that more conservation can result from "ingenuity in design and construction practice" than from revision of standards. Mr. Scheick emphasized the need to provide more incentives and rewards for ingenuity in design.

Industry Council (Continued)

output, that imports from Chile can be increased and that 200,000 tons more can be recovered from scrap. Any increase in copper scrap recovered would materially help construction, Mr. Veltfort said, because the industry depends as much on scrap copper as newly mined copper. Almost all foundry supply is scrap and 35% of mill supply comes from that source.

Aluminum Supply Reviewed

A lucid explanation of the aluminum shortage and prospects for alleviating it were submitted by William T. Mitman of the Aluminum Company of America. Mr. Mitman

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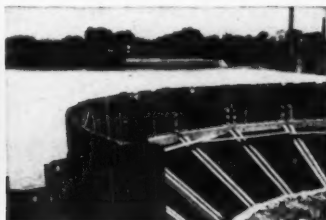
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Western Foundation Corp. and Spencer, White & Prentiss, Inc., contractors for Union Electric Light & Power Co. plant.



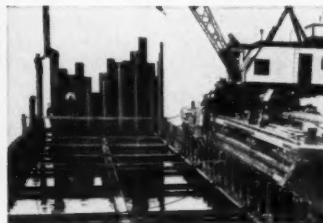
The Subterranean Corp., contractors for Owl's Head Sewage Treatment Works Project, Brooklyn.



Daniel O'Connell's Sons, Inc., contractors for Holyoke Water Power Co. new plant, Holyoke, Mass.



Fish Constructors and Oklahoma Contracting Corp. contractors for Transcontinental Gas Pipe Line Project, New York section.



Frederick Snore Corp., contracting engineers for Lawrence-Atlantic Beach Bridge, Nassau County, New York.



Morrison-Knudsen Co., Inc., contractors and engineers for Jones & Laughlin Steel Corp. plant expansion, Pittsburgh.

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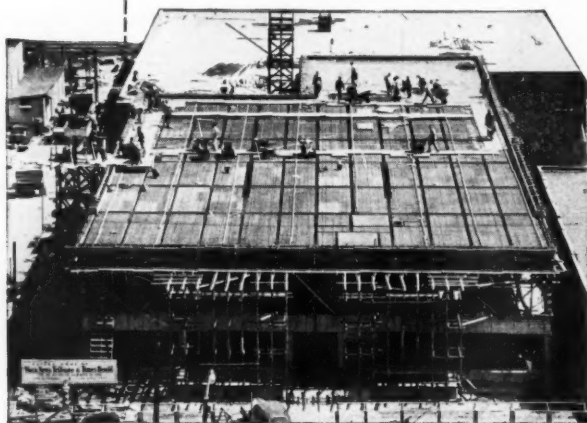
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THE CONSTRUCTOR, MARCH 1952

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"THE THEATRE GUILD ON THE AIR"—Sponsored by U. S. Steel Subsidiaries—Sunday Evenings—NBC Network

» Principles for legislation to clarify the disputes clause of the standard government construction contract form were recommended to the Senate Judiciary Committee on February 15 by representatives of The Associated General Contractors of America and others.

The presentations on behalf of A.G.C. were made by Managing Director H. E. Foreman and John C. Hayes, legal counsel. In attendance at the public hearings to support the presentations were President Glen W. Maxon and Vice President Arthur S. Horner of the association.

The need for legislation was brought to a head by the decision of the United States Supreme Court in the Wunderlich case on November 26, 1951 (December *CONSTRUCTOR*, page 24). Initial bills to offset effects of the court decision were introduced in January after the A.G.C. had written to the chairmen of the Senate and House Judiciary Committees, who both replied that they would introduce and sponsor remedial legislation. (February *CONSTRUCTOR*, page 25)

The court in this case interpreted the disputes clause of the government contract form to mean that the determination of the head of a federal department on questions of fact was final, and that there could be appeal to the courts only in cases where fraud on the part of the government could be alleged and proved. Fraud was limited by the decision as "conscious wrongdoing, an intention to cheat or be dishonest."

Foreman Presents Statement

Mr. Foreman emphasized the need for legislation by Congress by reviewing 30 years of efforts by the A.G.C. and other industry groups to seek a satisfactory disputes clause in federal contracts, which would permit review of disputes arising from determinations of department heads by courts of competent jurisdiction. He concluded:

"The holding of the Supreme Court in the Wunderlich case has confirmed our worst fears as to the effect of the finality clause in the 'disputes' section of the contract. In past years, when the association has made arguments for a right of appeal in this article, we have frequently met with the statement from government officials that our fears were groundless; that in spite of anything that could be written into the contract of this nature, the court would nonetheless take cognizance of

any injustice and afford the needed judicial remedy.

"This latest decision, in our estimation, completely demolishes this position. We, therefore, present to the committee our plea that legislation be enacted to establish in unmistakable terms this right of appeal. We believe that it is only fair that existing contracts and those arising out of contracts in process at the time of the decision, also, be afforded such remedy or relief.

A.G.C. Position Stated

"At the beginning of the present session of this Congress, our association addressed the chairmen of the Judiciary Committees of the Congress requesting legislation to embody the following principles:

"1. That any government contract, regardless of the language of the contract itself, shall be subject to appeal to appropriate courts from rulings of the contracting officer or the head of the department both as to matters of fact and law.

"2. That all existing contracts be modified accordingly.

"3. That any matters growing out of government contracts, which were legally in process at the time of the decision, have their status renewed as of the date of such decision, and that the contracts be construed in accordance with the principles set forth in 1 and 2.

"On behalf of general contractors we earnestly request favorable consideration, and ask early action so that the remedy may be accomplished during this session of Congress."

Standard Government Contracts

In his presentation Mr. Foreman first showed that neither government departments nor contractors were at liberty to make changes in standard government contract forms. Since 1921 when the Interdepartmental Board of Contracts and Adjustments was created in the Treasury Department, there has been a government interdepartmental board which drafts

standard government contract forms, including construction. Form No. 23 is now in general use in construction, and departments are not free to depart from its provisions generally.

Mr. Foreman next reviewed A.G.C. actions through the years in seeking a satisfactory disputes clause as a substitute for Article 15 in Form 23, concluding:

"At no time has it been possible to secure any substantial revision of the 'disputes clause' conferring authority on the contracting officer, subject to appeal to the department head, to make final and conclusive decisions on questions of fact. In the many conferences held with administrative groups representing various departments, bureaus, and agencies there have always been one or two representatives who voiced the opinion that no revision should be made of the 'disputes clause.' As a result, no change has been made, notwithstanding the ever-narrowing definition of the 'disputes clause' by the courts. . . .

"This demonstrates quite conclusively that legislative relief offers the only possibility of remedy."

Hayes Testifies for A.G.C.

Mr. Hayes concluded his statement: "We respectfully urge that this committee draft legislation that will grant the United States Court of Claims and the United States District Courts (to the extent that they now exercise jurisdiction concurrent with the United States Court of Claims) jurisdiction to hear, determine and enter judgment against the United States on any claim in which the contractor shall seek a review of a decision on a disputed question between the United States and such contractor, made by an officer, board or other representative of the United States under any contract entered into by the United States.

"If it shall be established to the satisfaction of the court that any decision by such officer of the United States is unjust, grossly erroneous, or not supported by substantial evidence, the court should be authorized to

A.G.C. Clarifies Issues Involved In Judicial Review Legislation

- Foreman and Hayes Impugn Wunderlich Decision
- Ask Senate to Offset Supreme Court Action

Renegotiation Board Extends Filing Time

• New Regulations in Final Form Expected in March

» THE RENEGOTIATION BOARD last month extended the time for filing financial statements by contractors whose contracts are subject to the Renegotiation Act of 1951.

All contractors with fiscal years ending on or before December 31, 1951, may now have until May 1, 1952, to file Form 1 of the Standard Forms of Contractors' Report. The former date was March 1 for contractors having fiscal years ending before December 1, and April 1 for those with fiscal years ending with the calendar year.

Form 1B of the report, which calls for more detailed financial data, should be filed with Form 1, or as soon thereafter as possible, the board said. The latest date on which this form can be filed now is 60 days after new due date of Form 1.

The regulations in final form which put the act into operation were expected to be issued by the board early in March. They were issued in tentative form in January, with opportunity provided for suggestions to make the regulations more workable.

Recommendations of The Associated General Contractors of America regarding construction contracts were reported in the January *CONSTRUCTOR*, page 31, and February issue, page 26.

The Board announced that its four regional offices are now in operation in Chicago, New York, Washington and Los Angeles. The 1948 act cases are now being assigned to regional offices, with all steel, oil, bearing, shipping and major rubber company cases being assigned to the Washington regional office.

ISSUES—Continued

award the contractor, notwithstanding such officer, board, or representative, the amount, if any, that would be due the contractor on the evidence presented to the court and in accordance with the principles and rules of law applicable to the claim; further, that any provision in any contract with the United States abridging the right of the parties to court review shall be null and void; and that the contractors' suits now pending in the courts, that have not been finally adjudicated, shall be safeguarded by the legislation as adopted.

"This legislation interposes no bar to further administrative review by an agency of government wholly independent of the department, agency, or bureau involved in the dispute. Hence, there should be little or no additional burden placed on the courts."

Reasoning Behind Testimony

After discussing the Wunderlich and other court decisions relating to contracts, Mr. Hayes stated that any department decision should be subject to review.

"Limiting the right of judicial review to decision where the evidence shows that the contracting officer acted arbitrarily or capriciously or that his decision was grossly erroneous will neither safeguard the rights of the parties to the contract nor insure that the decision will be reasonable. Such

limitation simply means that in order to secure judicial review it must be charged that the contracting officer's decision was founded on his own whim or will and not on the evidence. . . .

"It has been our experience over a long period of years that it is rarely true that a contracting officer is tyrannical or despotic. Yet, even in the Wunderlich decision, in order to secure judicial review of a contracting officer's decision it was necessary to allege that his decision was grossly erroneous, capricious or arbitrary. Now, under the Supreme Court's decision in the Wunderlich case, it is necessary to allege and prove fraud before judicial review is permitted. This situation does not make for good public relations between contracting officers and the members of the general contracting industry.

"In the vast majority of cases we have found the basis of the dispute to be simply an honest difference of opinion that could readily and satisfactorily be adjusted by permitting judicial review of the contracting officer's decision. In this way, and only in this way, can the rights of both the contracting parties be protected and the reasonableness of the decision guaranteed, based solely upon the evidence in each case. This is the protection that the general contractor should have as a matter of right to insure that his business cannot be destroyed simply by administrative action."

Termination of Contracts

Issuance of a new section, Termination of Contracts, of the Armed Services Procurement Regulation, was announced last month by the Department of Defense Munitions Board.

The section will become applicable after suitable distribution has been made. Then uniform policies and procedures will be applied in terminated contracts by the Departments of the Army, Navy and Air Force. The regulations will apply to all contracts executed after the effective date, but can apply to existing contracts if they are amended accordingly.

Copies of the new "Section VIII—Termination of Contracts" may be secured for 50 cents each from the Superintendent of Documents, Government Printing Office, 45 "G" St., N.W., Washington 25, D. C.

Comptroller General Asks Law

Legislation was recommended by the General Accounting Office. Frank L. Yates, Assistant Comptroller General, stated at the hearings:

"Since it has been the policy of our system of government to afford an independent review of administrative expenditures, by the accounting officers, I strongly recommend that the Congress enact legislation limiting the final authority of contracting officials to decisions on questions of fact, subject, however, to review by the General Accounting Office or the courts in cases where the decision is found to be fraudulent, arbitrary, grossly erroneous, or not supported by the facts. . . ."

Justice Department Opposition

A Justice Department representative interpreted one sentence of the Wunderlich decision to mean that if a department head made a decision without a thorough review of the facts this would mean the equivalent of fraud and the case would be subject to court review. Other witnesses did not agree with this theory.

He stated that the department saw no reason for any legislation and would oppose legislation to make changes in existing contracts, but would not oppose legislation which would be limited to providing court review of determinations in which there was such gross error as to constitute bad faith.

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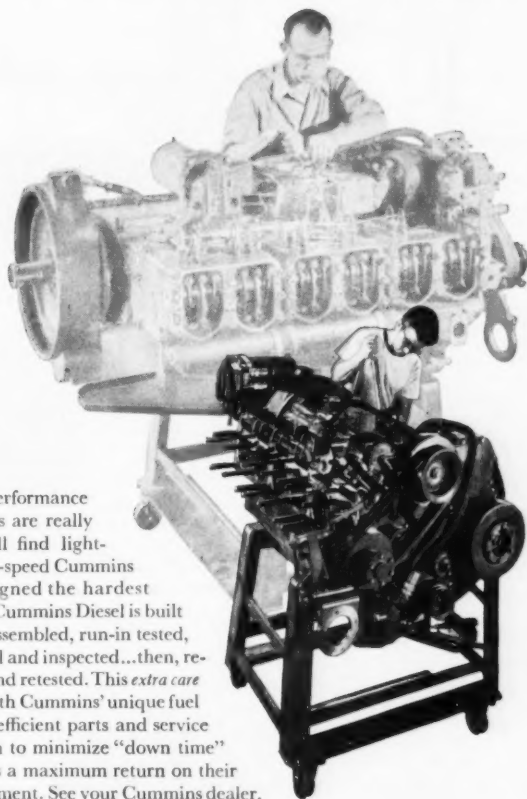


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THE CONSTRUCTOR, MARCH 1952

» A PROTEST against the proposal of the United Steelworkers of America to prohibit steel companies from "contracting-out" maintenance, repair and construction work at steel facilities was made last month to the Steel Panel of the Wage Stabilization Board by The Associated General Contractors of America.

The WSB panel which heard the steelworkers' wage increase proposal was urged to recommend against restriction of the steel companies' right to contract-out any or all of its maintenance, repair, reconstruction, or other construction in a statement filed by James D. Marshall, assistant managing director, and manager of labor relations of the association.

Item 16 of the steelworkers' wage policy statement was that: "The agreement shall apply to all work performed

Hit Attempt to Ban Steel Contract Work

• A.G.C. Protests Steelworkers' Proposal on Construction

in and around the properties and mines of the companies and all such work shall be done by members of the United Steelworkers of America. No contracting-out of such work shall be permitted."

Restraint of Trade

In concluding his statement, Mr. Marshall stated that the inclusion of Item 16 in the steelworkers' agreement with steel companies would have the same effect as:

"An illegal combination of union and employer in restraint of trade; an illegal boycott of the products and services of the construction industry; and

an illegal closed-shop condition for an uncertified union."

Dangerous Precedent

In pointing out to WSB the precedent which the steelworkers' proposal could establish, Mr. Marshall stated:

"If such restraint and such discrimination is permitted, why, then, could not the construction unions, by the threats of shutting down the emergency defense construction program of the country, ask government aid to get agreements with their employers that they shall not purchase or contract-out for any construction materials and equipment, but must now produce it in plants of their own and with construction workers only?"

"Such a demand by construction workers would be absurd, but no more absurd than this demand of the steelworkers to prohibit 'contracting-out' and it would be just as wasteful of the nation's productive capacity when needed most, just as un-American in character, and just as illegal in operation."

"The steel industry should be permitted to continue 'contracting-out' if and when it finds that the construction industry is better equipped to perform at less cost all new construction, all extensions, reconstruction, alterations, or additions to existing properties and such maintenance and repair work as requires the change, replacement, or addition of any material or equipment incorporated in or attached as a fixture to the structure or physical property, as well as construction operations such as stripping, handling and disposal of earth, waste and other materials."

Destroy Competition

Mr. Marshall also stated:

"A prohibition against 'contracting-out' in production industry generally means hundreds of thousands of trained construction workers would be required to leave their present employers, seek work under a new type of employer, have their skills go stale, and affiliate with another union under virtually a closed-shop condition without even an opportunity to vote on or select their bargaining representative, which right was assured under the Wagner Act and the Taft-Hartley Act."

Sanctions in Lump-Sum Contracts Tested

• Hedin Appeal Contends WSB Body Exceeded Legal Right

» WHETHER Wage Stabilization Board enforcement bodies have the legal right to impose sanctions against lump-sum contract prices in cases alleging violation of wage stabilization regulations was a major issue in the first appeal of the findings of a regional enforcement commission to the National Enforcement Commission.

The case, involving sanctions totaling \$80,000 against the J. D. Hedin Construction Co., Washington, D. C., imposed by the WSB's Michigan Regional Enforcement Commission, was argued before the national commission February 29, which was to decide the case early this month.

Two-Way Penalty

The regional commission found that the company paid 25¢ per hour in excess of the area rate established for bricklayers in collective bargaining agreements, on a \$7 million Veterans Administration hospital at Ann Arbor, Mich., and imposed penalties in the form of a \$40,000 deduction from the amount the firm may charge to expenses in paying income taxes and a \$40,000 deduction from amounts due the company for construction of the project under a lump-sum contract.

The sanction against the contract price occupied a considerable portion of the arguments, with defense counsel maintaining that the commission had no legal authority to impose a deduc-

tion from a company's lump-sum price under the Defense Production Act and WSB's enforcement resolution which refer only to the determination of "costs or expenses."

Production Act Quoted

Section 405 (b) of the act in question states in part:

"... The President shall also prescribe the extent to which any wage, salary, or compensation payment made in contravention of any such regulation or order shall be disregarded by the executive departments and other governmental agencies in determining the costs or expenses of any employer for the purposes of any other law or regulation."

The WSB enforcement regulation provides, among other things, that illegal payrolls must be disallowed and disregarded by federal agencies "for the purpose of determining costs or expenses" under federal contracts, "either directly or indirectly."

WSB Chief Counsel Isaac Groner contended that the price penalty was justified on the ground that the commission was carrying out the intent of Congress, which he interpreted as giving as much power as necessary "to preserve the national economy."

The company's counsel insisted that Congress meant what it said when it used the terms stated in Section 405 (b) of the Defense Production Act.

Deferment Plan for Apprentices Proposed

• Some 500 Apprentices Lost Monthly to Draft

A deferment program for apprentices similar to the one now in effect for college students has been drafted and is expected to be put in operation in the near future.

The proposed change in Selective Service regulations would permit deferment of apprentices in any trade who have been in training for one year or more. Men in trades classified as critical by the Secretary of Labor would be deferred after six months of training.

The plan is considered necessary to offset the loss of nearly 500 apprentices a month who are being called to military services and is in line with the general policy of deferring men whose services are "necessary to the national health, safety or interest."

Representatives of the Labor Department's Bureau of Apprenticeship and its Office of Defense Manpower Administration, the Selective Service System and the Federal Committee on Apprenticeship, composed of management, government and labor representatives, drew up a definite proposal in January.

Regulation Described

The proposal consists of a recommended executive order to be signed by the President and a draft of regulations to be issued by Selective Service to local draft boards.

The regulations would require that the local apprentice training program must have been in operation at least one year before the apprentices would be eligible for deferment.

Other requirements in the proposed regulation: "The program must offer apprentice training in an occupation which (1) customarily has been learned in a practical way through training on-the-job; (2) requires 4,000 or more hours of working experience to learn; (3) is clearly identified and commonly recognized throughout the industry; (4) requires during each year of apprenticeship the completion of approximately 144 hours of organized and systematic related trade instruction designed to provide the apprentice with learning in theoretical and technical subjects related to the occupation; (5) is not merely a part of an occupation normally learned through apprenticeship; and (6) in-

volves a development of skill sufficiently broad to be applicable in like occupations throughout an industry rather than of restricted application to the products of one employer."

"The program must be an organized plan written or implied embodying the terms and conditions of employment, training and supervision" and sponsored by an employer or group of employers, apprenticeship committee, or trade union.

State Selective Service directors would be authorized to approve training programs within each state and to certify each apprentice for deferment. Where deferment is not allowed, appeal to the Selective Service System would be permitted.

Source of Apprentices

Recently Bureau of Apprenticeship Director W. F. Patterson, Washington, D. C., stated that "Since the proposed deferment policy will not apply to new inexperienced apprentices, employers will inevitably still be faced with the problem of obtaining qualified young men to train. I know that a great many young men who would be available in normal times are being called by (the draft). This deficiency . . . can be overcome to a large extent by employing as apprentices men who are not subject to the draft—those in older age brackets, and youths not qualified for military service because of physical handicaps and veterans not on the reserve list who are available."

Another source, he added, is the veterans who return from Korea.

Purpose of Plan Stated

Speaking of the purpose of the proposed deferment plan, Mr. Patterson said "The basic philosophy entailed in the proposed regulations is to assure that the apprentice for whom deferment is requested is being thoroughly trained in all the skills required for full-fledged craftsmanship and will be adequately equipped when he reaches the status of journeyman to perform efficiently all the operations in the trade. The policy would recognize that the apprentice is an indispensable asset to the skilled labor force; that the time and effort expended in his training is of vital importance to American industry and

to the nation as a whole; and that the program in which he is trained must be of sufficient quality to contribute to our national growth."

Employment Peak Reached

Employment in the construction industry reached its all-time peak in August 1951, exceeding the record of August 1942 by many thousands.

According to Bureau of Apprenticeship Director W. F. Patterson, "construction contractors' payrolls reached 2,809,000 in August of 1951, which was 233,000 more than in August of 1942, the industry's peak employment month during World War II."

The two basic factors responsible for the rise, he said, were "the continuation of the unparalleled home building program which began with the resumption of peace-time activities, plus the new accelerated expansion in the building of industrial plants required for the production of military equipment and the building of houses for workers in those plants."

Mr. Patterson stated that expenditures for new industrial plants in 1952 are expected to reach about \$3.75 billion or \$1 billion more than in 1951.

He emphasized that a slackening of apprentice training at this time was "unthinkable."

Frey Gets Apprentice Honor

A scroll in appreciation of his 17 years of service as a labor member of the Federal Committee on Apprenticeship was presented to John P. Frey, president emeritus of the Metal Trades Department, American Federation of Labor, by Secretary of Labor Maurice J. Tobin.

Mr. Frey was the first labor member of the federal committee composed of representatives from labor, management and government, and established in 1935. He played an active part in getting passage of the Fitzgerald Act which authorized the Secretary of Labor "to bring together employers and labor for the formation of programs of apprenticeship."

Among those attending the special ceremony held recently in Washington, D. C., was H. E. Foreman, managing director of the national A.G.C. and a member of the Federal Committee on Apprenticeship.

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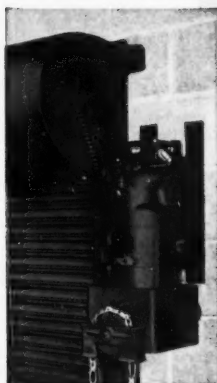
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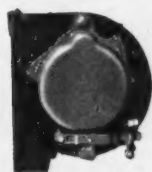
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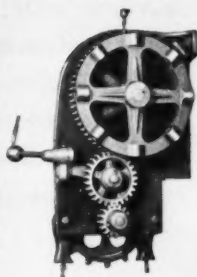
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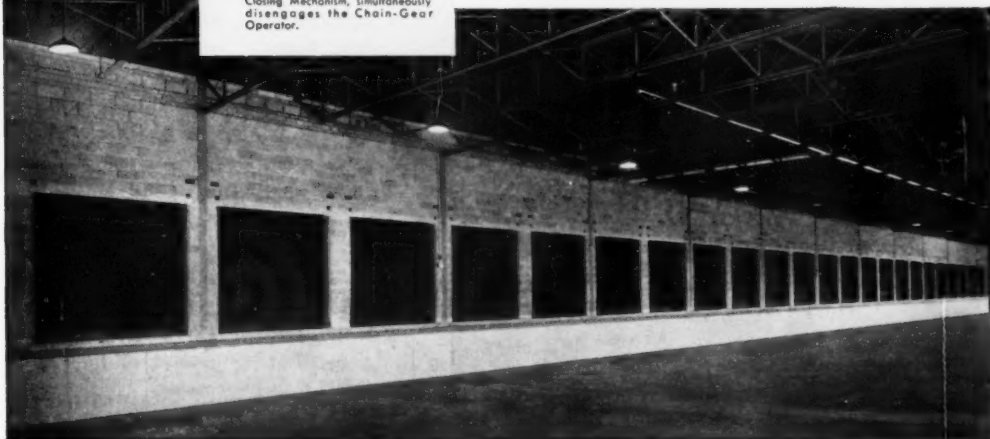
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Mahon Release Device and Governor on the Automatic Closing Mechanism of a Mahon Rolling Steel Fire Door. Fusible links release the mechanism in case of fire and the door closes automatically.



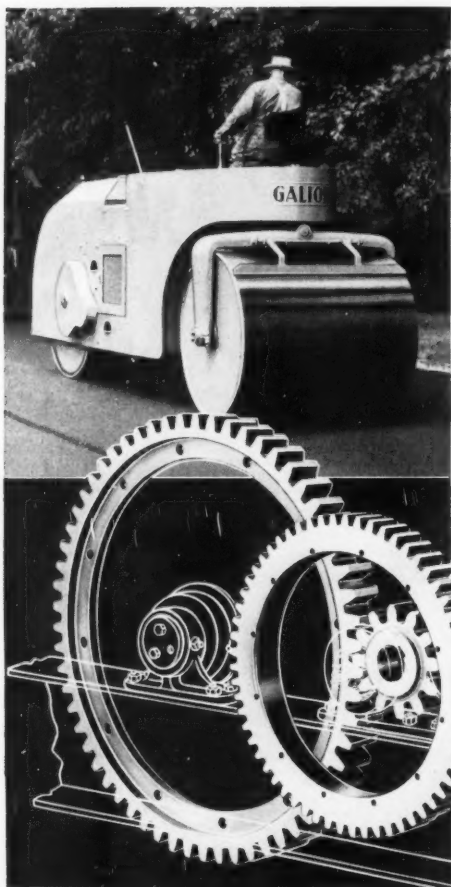
Mahon Release Device for Chain-Gear Operator on Mahon Mechanically Operated Rolling Steel Fire Doors. Fusing of the Fusible Link, which releases the Automatic Closing Mechanism, simultaneously disengages the Chain-Gear Operator.



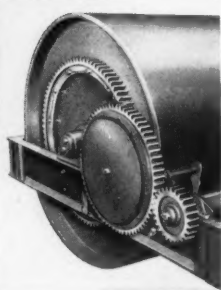
ROLLING STEEL DOORS, SHUTTERS AND GRILLES TO MEET EVERY REQUIREMENT

Twenty-four Mahon Automatic Underwriters' Labeled Doors installed in a new Warehouse for Food Warehouses, Inc., Detroit, Mich. Two Mahon Power Operated Rolling Steel Doors 17'-0" x 22'-0" are installed in railroad openings in this same building. Louis G. Redstone, Architect, Campbell Construction Company, General Contractors.

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FINAL DRIVE mechanism



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- GALION FINAL DRIVE spur gears are special alloy steel, accurately machine cut and heat-treated. No ordinary, uncut, cast gears are used.
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New Building Conference

The University of Colorado's First Annual Building Industry Conference was held last month on the university's Boulder campus. The Colorado Building Chapter, A.G.C., was responsible for spearheading plans and members of the chapter were principal speakers at the event.

The Colorado contractors group also held discussions along with university professors, architects and building materials producers. Chapter members addressing the audience of construction industry representatives and students were Chapter President G. H. Phipps, Harold B. Joy of Empire Construction Co., C. C. Schrepferman of Brown-Schrepferman & Co., and Howard E. Whitlock, Jr.

Weldon A. Snow, chairman, Building Division, Associated General Contractors of America, Washington, D. C., speaking on industry relations, told the gathering that problems arising on a job must be solved with a minimum disruption of work. That is only possible, he declared, where there is mutual appreciation of each other's problems by contractors, labor, architects and owners.

Mr. Snow appealed for a consideration of the human factors involved in contractor-employee relations. The spirit of fair play on the job would contribute to maximum efficiency and production, he said.

There are some differences between contractors' policies and the policies of other professional groups in the construction industry, Mr. Snow said, but they do not disrupt friendly relations. "It is a healthy condition," he said. "It indicates a progressive and virile industry." Throughout the industry these problems are being attacked and cooperation is being strengthened by joint committees.

Building Briefs

Thirty brick manufacturers in the Ohio region switched to modular sizes recently after a poll of architects revealed almost all in favor or unopposed to the change.

★ ★ ★

Capital construction recommendations to the New York State Legislature by Governor Dewey included \$45 million for mental institutions and almost \$24 million for educational building programs.

New England Moves to Hold Industries

• Encouraging New Plant Construction with Loans

» TWO NEW ENGLAND state governors are rebelling against the flight of many industries to the South (February *CONSTRUCTOR*). Fighting fire with fire, they have proposed schemes to add new industrial attractions to their states and induce more industrial construction there.

In Rhode Island, Governor Roberts would create a state industrial development corporation to maintain the state's economic stability in general and to aid industrial expansion specifically. The agency would be capitalized by the purchase of \$1 million in capital stock by the state. It would be authorized to obtain by gift or purchase real estate and industrial sites, to construct new plants and to maintain and repair improvements.

State Could Lease Buildings

The corporation's directors would lease the property at a rental sufficient to repay cost of construction and to retire the principal, as well as pay a fee (in lieu of property taxes) to the city in which the plant was located.

The corporation could borrow money, mortgage property and issue bonds with its assets as security. The state would not be liable for its debts.

In his proposal to the Rhode Island legislature, the governor said he found "no difficulty in reconciling such a lively experiment with sound principles of government. . . . In this and other states, government has helped provide public housing for its citizens without jeopardizing our system of private enterprise. I see no reason to believe we will injure Rhode Island business if we lend our aid to provide a place for our people to work as well as a place for them to live."

The governor declared that his proposal "means war" and is "the first shot in an economic counterattack against the raids being made on our industries by certain states."

Follows Precedent of South

This reference apparently included the states of Alabama, Kentucky, Louisiana and Tennessee, which have laws authorizing their municipalities to issue revenue bonds for the construction of plants for lease to private industries, and the state of Mississippi, which for some years has had a law empowering municipalities, af-

ter referendums, to issue general obligation bonds for such purposes. In all of these Southern states, the industrial plant bonds are exempt from federal taxation.

From the viewpoint of industries which have accepted the invitations of municipalities in the southern states with such laws, there are two main advantages of financing industrial facilities with public money rather than private bonds. The first of these is that such securities enjoy a low interest rate because of their income tax-free features. The other is that rent paid by an industry in a publicly financed plant is an expense allowed before income taxes, while a private corporation, by contrast, can fund its own bonds before taxes only to the extent that depreciation write-offs are allowed.

In Massachusetts, the legislature heard Governor Dever recommend that the state create an industrial plant trust, empowered to issue revenue bonds to finance construction of new plants for lease to industry.

State Would Build Plants

Under that plan, the state would build plants and lease them on a self-liquidating basis. The facilities would be tax-free, but the lease would provide for payment of an annual sum in lieu of taxes.

The governor also called for the creation of a new state agency to "encourage, assist, and promote long-term credits by private lending authorities," and merger of two allied agencies into one state commercial development commission.

★ ★ ★

A Massachusetts bill to increase the amount of veterans' housing bonds which the state may guarantee is pending. It would raise the ceiling to \$100 million. The Michigan legislature has been requested to broaden the state's housing laws to permit townships and counties to establish housing authorities.

In New York, Governor Dewey has asked an extension of the emergency housing act. He said that \$232 million worth of housing has been installed. The rest of a \$487 million fund will be spent on projects now under construction or being planned.

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17'x13' top on 50-ton body

Speeds up shovel or dragline loading, cuts spill at loader, reduces delays for spotting.

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Give extra traction and flotation, longer tire life... absorb shock, help compact fills.

Power-proportioning differential...

Delivers 4 times more power to drive wheel on firmest footing, pulls through mud, snow.

Fast, over-the-bank dump

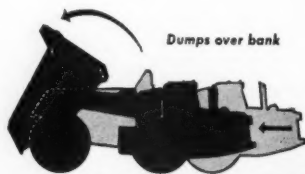
Far more brake per ton than any other hauler. Drive wheels stay on solid ground for safe, fast pull-out.

Positive power steer...

Push-button control of electric motor geared to king-pin gives safe control in any footing.

90° turns in 15' radius...

Big 36' rig turns in less than its own length... saves time spotting... saves time dumping.



Dumps over bank

Reinforced steel grid bowl

Floored with $\frac{3}{4}$ " tool steel over grid of 3" steel billets on 8" centers over $\frac{1}{2}$ " high carbon steel plate.

Complete self-cleaning...

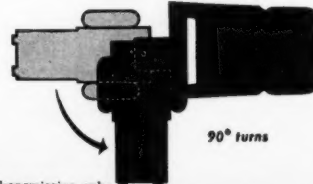
Body dumps with floor at 58° angle... induction heating available for winter work.

Simplified, rugged construction...

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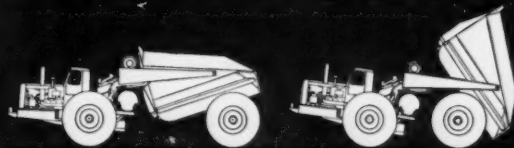
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PEORIA, ILLINOIS

Congressional Hearings Begin On Federal-Aid Highway Bills

- MacDonald Reports "Tremendous Backlog" of Needs
- A.A.S.H.O. Asks \$810 Million for U. S. Roads
- A.G.C. Testifies to Capacity of Contracting Industry

» THE STATE of the nation's highway system was explored in both Senate and House of Representatives hearings last month as highway officials, contractors and highway users gave their views on pending federal-aid legislation.

The four bills under consideration are for the purpose of granting funds to states for use on the 664,464-mile federal aid highway system. Three of the bills would provide \$600 million federal aid compared to the administration sponsored bill for \$400 million.

BPR Reviews Road Needs

Commissioner Thomas H. MacDonald, testifying for the Bureau of Public Roads, warned that "a tremendous backlog of highway needs has been accumulating" and that two-thirds of the federal aid highway system should have early improvement. These vast deficiencies have been caused by increased traffic and lack of new construction to keep pace with current demands upon the roads.

Pointing out the importance of adequate highways to the defense effort, Mr. MacDonald asserted, "Highway transportation is built right into the production lines of our industries and particularly our defense production plant." He cited one study revealing that all but 117 of the 13,000 workers in one plant depended upon automotive transportation to get to work and that 64% of incoming and outgoing freight was by motor truck.

Commenting on the deterrent to new construction that the current steel shortage has been, Mr. MacDonald predicted an easing of that problem by late 1952. Acceptance of steel allocations at the mill during this quarter has been "very much more encouraging" and 90% to 100% of the steel allotment may be expected in the second quarter, he said.

The new Administration bill has recommended a change in the formula by which the total appropriation is divided among the primary, secondary and urban federal-aid systems. The

new arrangement would give primary roads 50% of the total, secondary roads 25% and urban roads 25%. Mr. MacDonald explained that the 5% boost in the primary systems' share is recommended because included therein is the Interstate Highway System which is of "vast importance to the defense effort." That network, although only 6½% of the total primary mileage, carries 20% of the over-all traffic.

He also pointed out that an analysis of 5,501 federal-aid highway contracts (amounting to \$814 million worth of work) showed that highway contractors were frequently in the small business category. About 43% of the contracts were for less than \$50,000, 63% for less than \$100,000 and 85% for less than \$250,000.

"We prefer the contractor on highway work who in general is the owner and superintendent . . . the owner on the job, the man who makes the decisions, really becomes the efficient operator," Mr. MacDonald said.

A.A.S.H.O. Asks \$810 Million

Submitting an estimate of the nation's road deficiencies that called for \$32 billion worth of work on the federal-aid systems, the American Association of State Highway Officials asked that the federal-aid authorization be at least \$810 million annually.

B. D. Tallamy, president of the association, declared that the nation's highways have fallen behind another \$620 million worth of work since the last Federal-aid law was passed and called for more federal participation. He asked \$210 million for the Interstate Highway System alone—the 38,700 miles which Mr. MacDonald claimed carries 20% of the traffic outside of cities.

There has been a 90% increase in the number of trucks on the roads since 1945, Mr. Tallamy testified, and there were more motor vehicles all together in 1950 than it was predicted there would be in 1960.

He, too, saw highway contractors free of steel shortage difficulties by 1953 and urged that the trend toward complete disintegration of the national highway plant be halted at once.

Another highway official, R. H. Baldock, state highway engineer of Oregon, said, "Unless we do something for our road system and do it speedily, we face a national disaster."

H. E. Foreman, managing director, Associated General Contractors of America, told the House committee that competition prevailing in the highway contracting industry is keen and will continue to assure highway departments of economical construction. He pointed out that, although wages and materials have increased since 1948, the BPR composite mile price index has gone up only 3.2% since that time.

Foreman Credits Competition

Mr. Foreman credited continued competition between highway contractors as "one of the strongest forces working toward increased efficiency in highway construction. . . . So long as competitive conditions prevail, and there is no reason to doubt that they will prevail for an indefinite period, the public is assured that it will receive value for highway expenditures."

A nation-wide survey has revealed that the real capacity of the road construction industry has not been fully utilized and there are sufficient contractors for an enlarged program, Mr. Foreman testified. Reports from 30 states revealed that contractors there could handle 30% more construction than in 1951. Highway contractors of 28 of these states reported they could carry on programs 50% higher than last year and in 63% of the states reporting they reported the ability to do 100% more work than in 1951.

Work all over the nation was held up last year by inadequate steel supplies and funds, shortage of engineers and sub-professional workers, and lack of repair parts in some areas, the A.G.C. further stressed.

The A.G.C. testimony was presented to the Senate Committee by Arch N. Carter, manager, Highway Division, national staff.

Mr. Carter reported, "Evidence that the state highway departments are getting good bids is the fact that 99% of the national volume of federal-aid highway construction during the past five years has been done by the contract method."

Highway Briefs

The state roads commission in Maryland has issued an estimate of the state's highway needs covering the next 15 years and indicating a required expenditure of between \$350 million and \$400 million.

* * *

A rejuvenated road building program is expected to get under way in Alabama this year, now that voters have approved a state constitutional amendment making possible a \$25 million highway bond issue. Federal matching funds will bring that amount to \$50 million.

* * *

State Highway Commission Chairman E. H. Thornton has declared the need for \$219 million a year for five years to bring the Texas primary road system up to reasonable standards and pay for maintenance. Current expenditures are about \$110 million, nearly half of which goes for maintenance. He suggested retaining for highway construction the \$74 million being diverted to non-highway uses and increasing the present 4¢ gas tax.

* * *

Michigan looks forward to a 1952 highway year with a record-breaking total of about \$45 million available for new roads and bridges. About 556 miles of surfacing projects are slated for this year.

* * *

Illinois plans to spend a record-breaking total of \$100 million on highway construction and improvement throughout 1952. However, \$40 million of that amount depends upon outcome of a state law raising truck license fees, now pending before the state supreme court.

* * *

Minnesota highway officials have tabled a \$552 million backlog of construction projects they deem necessary to make state routes adequate for traffic demands. The department placed \$40 million in work last year.

* * *

Oklahoma's highway construction program may be boosted by more than \$10 million as the result of an act of the 1951 legislature which provided that any surplus in the state general revenue fund at the end of this fiscal year shall be transferred to the highway department for road building.

Propose Mississippi Parkway Project

• \$770 Million Tourist Road Would Follow River to Gulf

» AN AMBITIOUS PLAN to construct a 2,000 mi. Mississippi River Parkway, from the river's source in Minnesota to the Gulf of Mexico, has been proposed by the Bureau of Public Roads and the National Park Service.

Following the course of "Old Man River" through 10 states, the limited-access highway would be a boon to tourists and would reveal life on the Mississippi to thousands of Americans, the federal agencies believe. An illustrated report just released portrays a scenic route built on the levees, where feasible, and complete with concessions on bluffs overlooking the river.

Several alternate versions of the parkway are offered. If an entirely new route were built down one side of the river, it would cost \$770 million; if the parkway were built down both sides of the river it would cost \$1,450 million. Another plan would be to transform existing roads into parkways and to reroute them where necessary. This, exclusive of roadway construction and reconstruction costs, the

agencies say, would cost approximately \$81 million.

Just now, BPR and the National Park Service suggest, it would be wise to acquire the land needed for right-of-way and they recommend that legislation be drawn up to provide the necessary federal funds.

The states involved would be responsible for matching the federal-aid monies appropriated for the project if the parkway were made part of the federal-aid highway system, as is urged.

New Road Movement Pushed

The country will soon witness the formal organization of a nation-wide movement for adequate highways. Arthur C. Butler, director of the National Highway Users Conference, told a recent meeting of truck owners in Washington, D. C.

Addressing the annual convention of the National Council of Private Motor Truck Owners, Mr. Butler said that something must be done to halt the steady decline of the country's road system. He pointed out that "motor vehicle registrations have leaped ahead of all predictions to more than 52 million and our roads have become outmoded simply because they were not built to accommodate so much traffic."

While no super-organization will be established to publicize highway needs, a number of participating organizations will make renewed efforts to secure new facilities through the movement "PAR" (Project—Adequate Roads). PAR would promote continuous programming of highway construction to meet urgent needs, as determined under a system of sufficiency ratings (February *CONSTRUCTOR*) and would funnel into one joint effort for adequate roads all the energies of highway users and allied industrial groups.

In addition, PAR would call for a fair distribution of highway costs, the protection of highway revenues from diversion, and efficient highway administration.

The Associated General Contractors of America is among a number of organizations supporting the movement. Others are automobile clubs, farm groups, manufacturers, truckers and other highway users.

Roads Important To Defense

In an attempt to underline the defense-supporting nature of highways today, the Bureau of Public Roads has surveyed traffic over a typical modern facility. The study revealed that the difference between an adequate road and a poor alternate route could be measured in thousands of lost man-hours and dollars.

The road selected, Shirley Highway in Virginia, is a 17-mi., controlled access route. By using it, instead of previous main routes, commercial operators are reportedly saving 311,000 truck and driver hours annually, besides economizing on fuel and tires. Translated into dollars, the amount saved by commercial users would be close to \$2 million. The similar savings to passenger car operators would be tremendous, it is reported.

The bureau notes that such facilities make a direct contribution to the defense effort and are well worth the steel required for their construction. Each ton of steel used in building the Shirley Highway is estimated to be saving more than 10 average working days per year for commercial users alone.

Here's where it pays to use carbide insert bits:

Under drilling conditions like those at the right, it's a safe bet that carbide insert bits can cut your costs, boost your production. Carbide insert bits drill longer without sharpening; bit reconditioning is simplified and drillers spend less time changing bits. Since carbide insert bits hold their gauge longer, you can bottom your hole in the desired size without having to remove excess rock to allow for tapered hole.

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6. Block hole drilling in hard ground
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Here's why it pays to use **TIMKEN®** carbide insert bits

If carbide insert bits are your best bet, your best bit is Timken®!

Timken carbide insert bits are removable—screw on or off the drill steel. As a result, drillers have sharp bits at all times without changing the entire steel.

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Long Shield Saves Cofferdam on Dam Site

Shunting aside the racing waters of a mountain river is a prospect not carelessly approached by dam builders. Even at low-water season, a river can exert a persistent damaging pressure on cofferdams and when unforeseen floods swell the river's crest, cells may be wrenched away.

Recently, constructors of the Chief Joseph Dam in Washington won such a bout with the powerful Columbia River, but there were some anxious moments before she was beaten, and the river wrested a lot of time and money from her conquerors.

High Water Threatens Cells

Builders of the dam, world's second largest hydro-electric power project now well under way, constructed a cofferdam, 2,000 ft. long, to protect the construction site. Twenty-five steel piling cells, 60 ft. in diameter, were driven to the very irregular rock-bed. This base precluded a tight footing for the piling. At express speed of 35 mi. per hour, the river, 40 ft. deep in the high water period, swept past the cofferdam. The barrier was not expected to withstand the turbulent water, with its surges and whirlpools, for over a couple of weeks and when the high-water season stretched out to two months, the structure began to fail.

"Windows" developed in the cofferdam fill and sand, gravel and 9-in. stones were washed out. The cells

began to chatter and construction workers behind the cofferdam grew apprehensive. It became apparent that the whole structure was in danger.

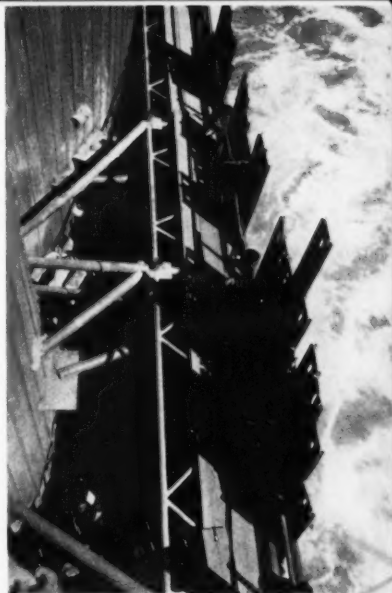
Instead of retreating, the Seattle District U. S. Army Engineers and the dam builders advanced their line. They pushed out a bit farther in the current and built a 320-ft. "blister," or shield along the water side of the cofferdam.

The diaphragm consisted of 16-in. steel piling, $\frac{3}{8}$ in. thick, set in a frame fashioned of steel pipes. The frame was of 12-in. pipes set vertically 12 ft. apart. Horizontally, the frame was tied together with 8-, 6- and 4-in. pipes. Slotted 6-in. and 4-in. pipe welded to the piling formed dumb-bell connections which held the individual lengths together in one unbroken shield along the face of the cofferdam. The piling was driven down to bedrock within this pipe frame.

Diver Plugs "Windows"

With the protective diaphragm in place, the builders next plugged the space between the base of the shield and the cells. They accomplished this by lowering bags of cement through a 30-in. torpedo tube to a diver who worked under water to stuff the "windows" in the cofferdam. He stacked cement up to a height of 3 to 6 ft., depending upon the size of the gap.

While the shield was under construction, trucks and a power shovel stood



This close-up view of a section of the protective blister shows how the 16-in. piling was placed. Pipe welded to the piling formed dumb-bell connections. Bags of cement were lowered to a diver who worked in the area between the shield and the cells to plug "windows."

by within the cofferdam to make emergency fills wherever a weakness developed behind the cells. More than 7,000 cu. yds. of fill was required there, with 2,600 yds. going in at one time. So great was the force of the river against the cells that one of them was pushed considerably off its vertical axis before the blister was completed.

But the corrective measure proved satisfactory, the project is progressing well, and the U. S. Engineers picked up the tab for its cost—\$350,000. The work was done by the Tavares Construction Co., A.G.C., of La Jolla, Cal., for the general contractor on the dam.



View of the 320-ft. protective diaphragm constructed along leaking cofferdam cells on the Chief Joseph Dam project. Note turbulent waters.

A.S.C.E.-A.G.C. Group Meets

The Joint Cooperative Committee of the American Society of Civil Engineers and the Associated General Contractors of America met in Washington, D. C., last month to appraise the engineer shortage, proposed legislation to moderate effects of the recent Wunderlich case, and requests that contractors submit alternate designs in Air Force work.

The group learned that, although first year enrollments in engineering curriculums was higher last fall than in 1950, potential graduates are substantially less and a critical shortage still exists.

Pipelines' Past and Prospects Surveyed

• Major Lines Built; Future Growth in Depth, Contractors Told

» A HISTORY and forecast of developments in the pipeline industry by Gardiner Symonds, president of the Tennessee Gas Transmission Co., indicates that the future growth of

the industry will be in "depth" as the major trunk lines have been constructed in all sections of the country except the Pacific Northwest.

"The principal trunk line carriers

have been built," he told contractors attending the fourth annual meeting of the Pipe Line Contractors Association held recently in Houston, but, "their growth has not ended. They will continue to add capacity in the future, as they have in the past, by the construction of additional pipelines parallel to their existing systems."

"But this will occur only where the growth of the distribution systems which receive their gas from the trunk transmission lines will justify it from every standpoint, especially that of paying out the necessary investment over the life of the financing required for the construction."

Calls for Ingenuity

Stating that pipeline construction in 1952 would be, in his opinion, less than the 1951 volume, Mr. Symonds went on to predict that on a long-range basis "the key to the future lies in one word—ingenuity. By this I mean ingenuity on the part of research and design engineers in the planning of more efficient and less costly pipelines and power facilities, ingenuity on the part of the operating companies in devising more efficient and less costly operation procedures and ingenuity on the part of you pipeline contractors yourselves in developing more efficient and less costly construction methods."

Sketching the history of pipeline development from the canal systems constructed by the Egyptians before 1400 B. C., he explained that there have been two general stages in transportation development. First came the batch system which he compared to a bucket brigade and second came the continuous system, a form of which is the pipeline.

"The pipeline," he said, "when compared to other ways of moving goods is especially free from interruption or delay to movement of the product. It is built insofar as possible beyond the reach of weather."

Benefits of Pipelines

He pointed out that once the line has been installed, the low labor costs as compared to other forms of transportation, make the pipeline economically efficient.

The major uses of pipelines today are for moving gas, oil and petroleum, he said, but lines are also used for cement, salt brine, such chemicals as oxygen, liquid chlorine, ethylene dichloride and hydrocarbons.



The Bettmann Archive

"TAVERN OF THE DEVIL"

Whether or not this site was appropriate, the first known organized attempt to underwrite Fidelity Bond coverage was launched during 1720 in the "Tavern of the Devil", Charing Cross, London.

English newspapers recorded this event, announcing that books were opened at the Tavern to underwrite coverage for domestic servants' dishonesty. The rate was six pence for each share of stock, and Fidelity promoters guaranteed to pay losses resulting from theft by servants who were registered and ticketed by this new society.

(Second in a series of advertisements tracing the history of the Fidelity and Surety Industry)

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Seaway Action Still Pending

United States participation in the St. Lawrence Seaway project was strongly recommended in January by the President in a special message to Congress.

He asked for prompt action to carry out a 1941 agreement between this country and Canada for the construction of a seaway and a power project. Canada has announced that she will proceed alone if the United States delays much longer.

Backing up his request with the American steel industry's need for the top-grade iron ore available in the Labrador-Quebec area and the advantages of a "relatively safe inland waterway" to deliver the ore to Great Lakes steel centers, Mr. Truman asserted, "We should not be content to be merely a customer of Canada for the use of the seaway after it is built."

Terse objection to the President's message came from Senate Foreign Relations Committee Chairman Connally (D., Tex.) who told the Senate, "This bill ought not to be passed." Seaway legislation is pending before his committee and before the House Public Works Committee. Lengthy hearings were held last year and, so far, no action is scheduled by either House.

Heavy Construction Notes

A recent Federal Power Commission report discloses that construction was authorized in fiscal 1951 for gas facilities costing an estimated \$725 million. Involved were 8,695 miles of pipeline.

Total allocations of 2.4 million tons of line pipe for oil transportation and gas transmission have been authorized in the first four quarters of the Controlled Materials Plan.

A report outlining a \$300 million program to control floods along the Grand River in Missouri has been sent to Governor Smith by a committee of state and federal agencies. The construction of six dams, 171 miles of levees and stream-straightening activities would account for \$173 million.

To better handle the larger military

construction programs being assigned to the Corps of Engineers, a new post has been created, that of Deputy Chief of Military Construction. Col. McDonald D. Weinert, formerly chief of the Engineering Division, will serve in the new post.

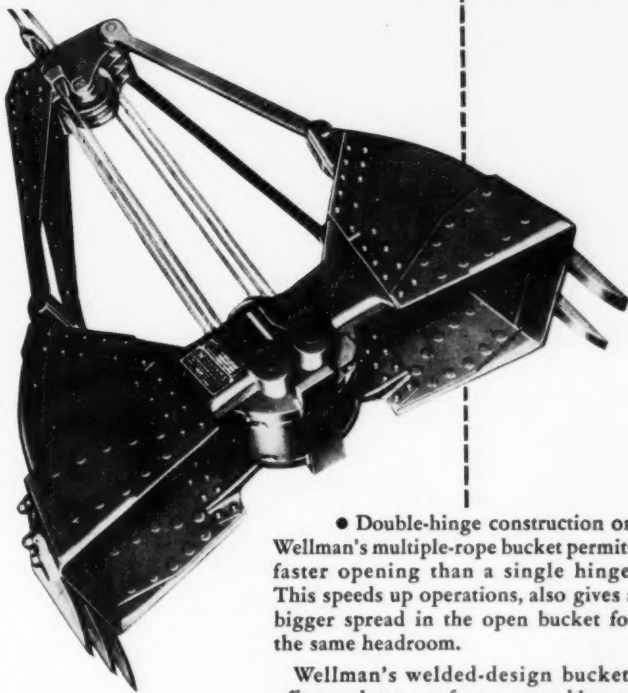
The Moles, New York association of leaders in tunneling and heavy construction work, have honored Stephen D. Bechtel, president of Bechtel Corp.,

A.G.C., and Charles B. Spencer, president of Spencer, White & Prentiss, Inc., A.G.C., for "outstanding achievement in construction."

Mr. Bechtel was cited for his leadership in the fields of oil refining, pipelines, dams and shipbuilding construction. Mr. Spencer was winner of the annual award for his pioneering work on new foundation methods and accomplishments in the fields of subway, tunnel and dry-dock construction.

WELLMAN Williams Type

FAST BUCKET OPENING SPEEDS OPERATIONS



• Double-hinge construction on Wellman's multiple-rope bucket permits faster opening than a single hinge. This speeds up operations, also gives a bigger spread in the open bucket for the same headroom.

Wellman's welded-design buckets offer you better performance and longer service. In all types and sizes you'll do better with Wellman!

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Hydraulically-operated Back Hoe — Tractor-compressor-back hoe combination offers big savings on digging jobs too small for power shovels, too big to be done economically by hand labor. Bucket sizes, 12" to 22". Digging depth, 6' to 7". Swing, 60° each side of center.



Le Roi-CLEVELAND Patcher mounts on rear platform of Tractair. Drills closely-spaced holes within 7-foot radius, then broaches the section of pavement loose for easy removal. On this job, the bricks were removed first to get to the pavement underneath.



Pavement Breaking — Tractair puts air power to work running Le Roi-CLEVELAND Breakers. When the breaking job is done, Tractair mops up with its front-end loader. Tractair can be used also to run Le Roi-CLEVELAND sinker drills, day spades, backfill tampers.

with Mobildrill

**on railroad siding job gives
more than twice former footage
for less than half equipment cost**

AS much as 750 feet of hole daily, where only 300 feet were drilled before! More than double the production of three hand-held sinkers and a 315 cfm compressor! Substantial savings on both fuel and equipment costs! That's the remarkable record of a Le Roi Tractair Mobildrill on the Coal River Mining Company's development of a railroad siding at their strip mine in Nellis, West Virginia.

Tractair Mobildrill is a light-weight Le Roi-CLEVELAND wagon drill unit mounted on Tractair — a combination 35-hp tractor and 105-cfm compressor. One man can drive the Tractair Mobildrill and handle every phase of drilling — vertical and horizontal holes at any

angle and any elevation up to 12'. Swinging boom permits drilling 4-6 holes of a pattern from one spot.

The Mobildrill attachment is just one example of how Tractair's versatility pays off in lower costs and minimum investment in special equipment. The usefulness of Tractair can be multiplied by using Le Roi-CLEVELAND air tools for breaking pavement, clay digging, tamping fill. Tractair also can be used for loading, lifting, back-filling, snow-plowing, etc., when equipped with a front-end loader and special attachments.

Prove this to yourself. Watch a Tractair at work. Make arrangements with your nearby Le Roi distributor. Write today for job-data sheets and bulletins on Tractair.



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MORE UTILITY! MORE PROFIT!



Loading — Front-end loader can be attached to Tractair in only a few minutes. Boom combines bucket and crane. Crane folds back out of way when not in use. Bucket holds 10½ cu. ft. — lifting capacity is 1000 lbs. Lifting capacity of crane is 800 lbs.



Backfilling — Replacing the bucket on the loader with a backfill blade adds to the variety of jobs a Tractair can handle. Backfill blade is 6' wide, mold board is 2'6" high. Maximum lift above ground is 1'4".



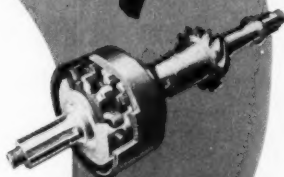
Trac-Jac — A Le Roi-CLEVELAND air-feed sinker drill mounted on a Tractair. Feeding and drilling controls are within easy reach of operator. The mobility of this unit makes it ideal for mud-jacking and many other applications.

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Rough terrain or hub-deep mud holds no terrors for Mack six-wheel trucks. You can count on these unfaltering Macks to take your loads "out of the rough"...to maintain steady, dependable schedules...because they have the unique advantage of Mack's *Balanced Bogie with exclusive Power Divider*.

With the Mack Power Divider, a non-spinning true differential, torque is divided between the two bogie axles and between the four driving wheels. Delivering torque smoothly and continuously without destructive shock in proportion to wheel traction, the Power Divider stops power waste through useless slipping and wheel spinning—keeps Macks moving where other trucks bog down.

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In tough dump truck service Mack six-wheelers get you "out of the rough" with unfailing dependability.

A.G.C. Annual Report

• To the 33rd Convention, The Associated General Contractors of America, Detroit

By H. E. Foreman, *Managing Director*

YEAR OF GREATEST ACTIVITY

From the conclusion of the association's 32nd annual convention until now, the construction industry has been subjected to a greater amount of government control than in any other period since the war years.

During 1951 the total dollar volume of construction activity for both defense and civilian purposes established a new record of approximately \$39 billion, and exceeded the value of agricultural production.

For each of the major events of the year affecting the construction industry the A.G.C. took positive action for the benefit of its members, the industry, the government and the public.

At the same time the association expanded many of its normal activities which are directed toward long-range improvement of industry conditions. More productive work has been accomplished by the association during the past 12 months than in any previous year of its history.

Major events of the year for construction, and corresponding A.G.C. actions have been:

Construction Activity. Almost complete control over construction activity has been taken by the National Production Authority in successive actions, and the A.G.C. has presented information to that agency for development of realistic controls and administrative procedures to give prompt approvals to essential projects.

Materials Control. Directing the flow of principal materials to most industries was assumed by the government through the Controlled Materials Plan, and the A.G.C. furnished information on how this plan could effectively channel materials to construction projects for the first time.

Wage Stabilization. Wage stabilization was put into effect by the Wage Stabilization Board, and the A.G.C. helped to establish and is represented on the Construction Industry Stabilization Commission which administers the wage stabilization program in construction.

Jurisdictional Disputes. The National Joint Board for the Settlement of Jurisdictional Disputes has entered its fourth year, and the A.G.C. continues to be represented on this board which has helped to reduce substantially the work stoppages caused by jurisdictional disputes.

Price Control. Price control regulation for the construction industry was put into effect by the Office of Price Stabilization, and the A.G.C. presented information on how the regulation could be drafted to fit industry operations.

Contracting for Government. Principles of contracting for the federal government were upset by the Supreme Court decision which limited judicial review of findings of fact by department heads to cases in which fraud on the part of government could be proved, and the A.G.C. has taken the lead in recommending remedial legislation to Congress.

Renegotiation. The Renegotiation Act of 1951 was passed, with regulations to put it into effect expected next month, and the A.G.C. has recommended to the Renegotiation Board principles for handling certain construction contracts which would be of benefit both to the government and the industry.

Defense Projects. The industry began to feel the impact of defense construction projects which upset normal industry conditions, and the A.G.C. conferred with government agencies which award defense construction contracts to explore ways of minimizing the impact of defense projects while that work is executed with necessary speed.

Military Duty. Army reserve construction units sponsored in the Affiliation Program by A.G.C. chapters were called to active duty, and two have performed outstanding engineering feats in Korea.

A.G.C. membership passed 6,000 and now exceeds 6,100.

THE NATIONAL ASSOCIATION

The national association concludes its 33rd year with its membership, its constructive activities, its prestige and that of its members climbing to new high levels.

Emergencies of the mobilization program, the continued growth of membership, and increasing recognition of the value of its work have brought heavier demands for A.G.C. services.

The normal work of the past three decades, and the actions to meet emergencies during the war years, have given the association the experience to be able to handle

the growing volume of emergency and long-range work.

During the past year practically every major problem to confront general contractors has received positive action by the A.G.C.. Members and chapters have been informed of developments and A.G.C. actions accurately and promptly.

Association's Program. The association's program has been under almost daily study by the officers and members of the Executive Committee. There have been few days during the year when President Glen W. Maxon and Vice President Arthur S. Horner have not been in direct contact with the national office by personal visits or by telephone. They have traveled extensively to meet with chapters.

Members of the Governing and Advisory Boards, chapter presidents and managers, and others considered industry problems and association policy at the Mid-Year Board Meeting in Chicago, September 6-8, 1951.

The Executive Committee also held meetings in Washington April 26-27, and December 6-7; in Hershey, Penna., July 11-12; and in Chicago on September 5, 1951.

Meetings of various government industry advisory committees have brought officers and members to Washington frequently during the year for consideration of important industry and association problems.

Throughout the year important work has been done by chairmen and members of A.G.C. committees, task units, joint cooperative committees, industry advisory committees, and through other activities.

National Office. While work to meet emergencies developing through the mobilization program has been heavier, it is notable that added impetus also has been given to many other long-range activities.

More members of the national staff have done a greater amount of traveling during the year to meet with chapters, groups of chapters, or other industry groups.

As samples of national office activity, the mail room during 1951 multilithed or mimeographed 625 bulletins, each of which contained useful information, exclusive of issues of the *National News-Letter* or *THE CONSTRUCTOR*. Mailings required more than 1,000,000 pages and 300,000 envelopes.

The number of incoming and outgoing telephone calls increased by more than 8,500 from nearly 48,000 in 1950 to more than 56,000 in 1951, of which more than 51,000 were local calls, and nearly 5,000 long distance.

Additional space is being secured in the Munsey Building so that the association can house the increased staff and facilities necessary to carry out its work more effectively.

All indications now are that there are continuing demands for A.G.C. service, which will continue to be met promptly and effectively.

CHAPTERS AND BRANCHES

For chapters and branches the past year likewise has been one of great activity.

The chapters have had the tasks of meeting problems as they have developed in their respective communities, of adapting national policies to conditions in their areas, and of supplying information so that appropriate association recommendations can be made to government agencies for national policies.

In this report it is impossible to list the outstanding achievements of the chapters and branches. It can only be noted that each year they do a greater volume of increasingly effective work, and that the coordination and cooperation between the chapters and the national association has been excellent.

New Chapters. New chapters added during the year were the Upper Peninsula Michigan Chapter, Sault Ste. Marie; A.G.C. of Maine, Augusta; and El Paso Chapter, Texas. Charters are expected to be issued soon to the Florida Central East Coast Chapter, Daytona Beach; Youngstown Chapter, Ohio; and West Texas Chapter, Abilene.

This will bring to 118 the number of A.G.C. chapters and branches. There are now chapters covering every state of the Union and Alaska. Other new chapters are expected to be added during 1952.

Most chapters increased in membership during the year. The number of areas is increasing where substantially all eligible general contractors are members.

Secretaries' and Managers' Council. The A.G.C. Secretaries' and Managers' Council continues to be an increasingly important factor in successful chapter management, and a source of closer liaison between the national association and the chapters. The council holds day-long meetings at A.G.C. board meetings and annual conventions.

Chapter Presidents. More active interest is taken each year in work of the national association by the presidents of the chapters and branches. At the last annual convention the customary breakfast of presidents of the chapters and the national association provided such an excellent opportunity for the discussion of mutual problems that two meetings were held. The breakfast will be held at this convention.

VOLUME CONTROLS

The volume of construction activity has been brought almost completely under government control during the past year by actions of the National Production Authority and other mobilization agencies.

NORTHWESTS

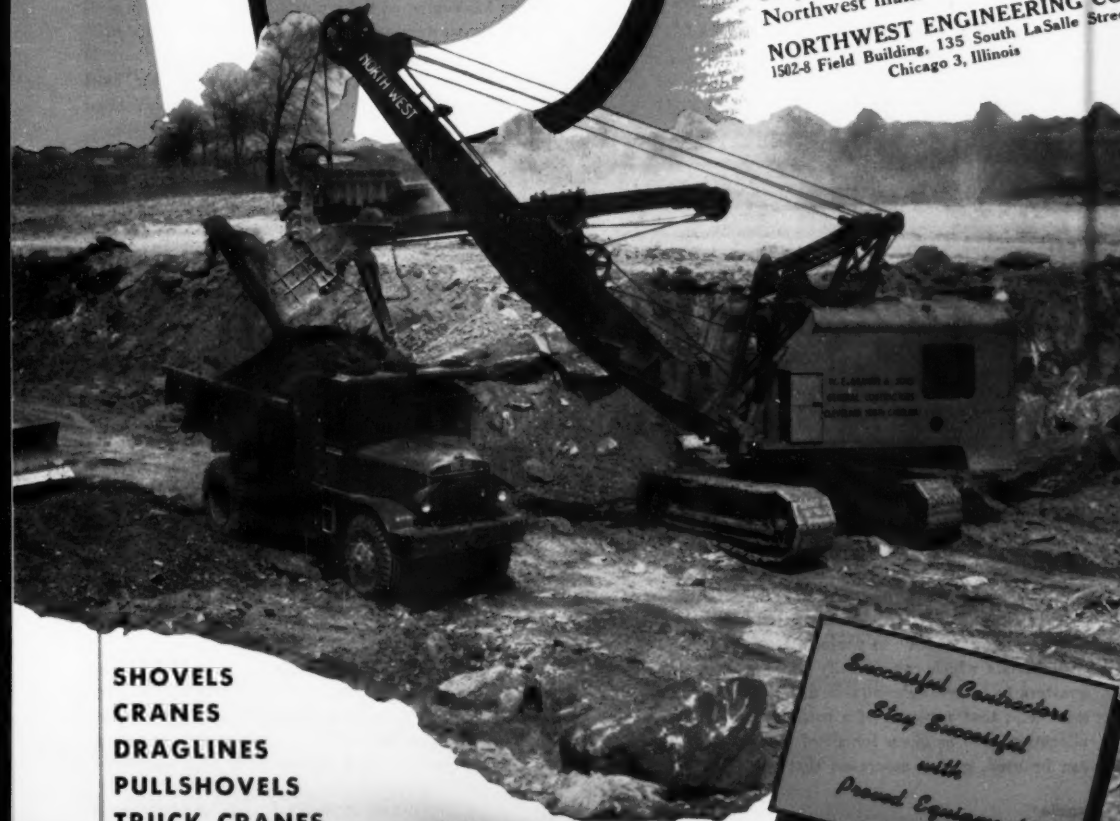
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Stay Successful
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Proved Equipment*

The A.G.C. has cooperated with these agencies and supplied them with helpful information in order that regulations issued could be applied in a realistic manner to the construction industry.

Mobilization needs have thrown the construction volume out of balance, with approvals being given to projects considered essential to the defense effort and essential civilian activities, while projects considered less essential have been postponed.

Construction activity has tended to become spotty, with large amounts of work in some areas while activity has been falling off in others.

A.G.C. actions have been taken in accord with association policies, and after careful study by the officers and staff.

Amended Order M-4. Last May when NPA amended Order M-4 to require government approval of all projects requiring 25 tons or more of steel, the A.G.C. worked to secure adequate administrative procedures so that projects could be approved promptly, and to avoid serious delays to the industry at a time when it was building up to the peak of yearly operations.

Controlled Materials Plan. In August, when NPA announced that effective October 1 all construction requiring more than specified minimum amounts of controlled materials would have to come under CMP, the A.G.C. again worked for realistic regulations, policies and administrative procedures.

Drives have been made in recent months to secure additional allotments of steel for school, highway or other types of construction. The A.G.C. position has been that it is the responsibility of owners to demonstrate the need for projects and of the government to make appropriate allotments; not that of the association or general contractors.

Recommendations on Controls. Various recommendations with respect to controls have been made in recent months by the A.G.C., and by the NPA Construction Industry Advisory Committee and the Construction Industry Advisory Council—composed of all national groups interested—both of which have A.G.C. representation.

These recommendations were that the construction industry should have adequate representation on mobilization agencies so that proper consideration could be given to the essentiality of the industry's operations; that allocations should be made to projects for only the amounts of materials which can actually be used during various quarters to insure an equitable distribution of available materials; that approval of a project should imply that allocations will be given for all of the materials as they can be used, giving assurance that the project can be

completed; that notice be given of when materials are likely to be available for types of projects now postponed in order to encourage advance planning; and that a simpler priorities system for defense projects be established when it is found that the complicated Controlled Materials Plan is not needed in a peacetime economy.

At the latest meeting of the NPA Construction Industry Advisory Committee this month the advice of industry members was sought, and indications were that regulations would reflect the suggestions.

As more productive facilities come into operation and the heavy pressure for defense needs eases, there will be less need for confining civilian construction within the restrictions of CMP, and a priorities system could be used to assure materials for defense projects.

While many types of construction are being postponed by government action, the opportunity is presented for the sound advance planning of the increasing backlog of needed construction so that this work can be started promptly when materials are available and controls are relaxed.

Members Informed. Throughout the year the association has continued to keep members and chapters completely, accurately and promptly informed of all significant developments and association actions. There is evidence that A.G.C. chapters have become the most complete source of information locally on mobilization developments.

The A.G.C. Market Development Committee met prior to the convention to consider market problems of the industry.

PRICE CONTROL

A realistic approach to an almost impossible problem was taken by the Office of Price Stabilization in Ceiling Price Regulation 93 (Construction and Related Services and Sales of Installed Materials) which became effective November 20.

The regulation was tailored to fit operations of the industry, and OPS stated that generally "this regulation does not operate to compel changes in business practices, cost practices, or methods established in the industry."

In drafting the regulation, the OPS consulted with its Construction Industry Advisory Committee, on which the A.G.C. was represented, and had the benefit of information supplied by the A.G.C. and other associations in the industry.

There were months of confusion on how other price regulations could be applied to the construction industry before CPR 93 became effective. The association constantly sought interpretation of other orders, or rulings on how contractors could operate in a legal manner.

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WITH AMERICAN EXPLOSIVES**



AMERICAN EXPLOSIVES—because of their proved reliability—were used to move earth and rock on the Pennsylvania Turnpike, which now extends from the outskirts of Philadelphia westward to the Ohio Border.

On this and similar jobs, you can be sure of the best results every time because every shot fired with AMERICAN EXPLOSIVES is backed by years of careful research, unremitting laboratory control and modern methods of production.

Available from strategically located plants and distributing magazines, AMERICAN EXPLOSIVES come in a wide variety of strengths, velocities and densities for your convenience . . . remember, make your next order AMERICAN.

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Conferences were held with the OPS enforcement division to point out the inadvisability of enforcement actions until OPS could tell contractors how they could comply with the regulations. In issuing CPR 93, OPS stated in part:

"To reconcile the traditionally slender margins and great element of risk peculiar to operations of a large portion of the construction industry with the necessity, under CPR 34, to absorb labor and (in most cases) material cost increases, was difficult in the extreme . . . Because of the nature of the industry . . . it has been considered desirable to devise a method of pricing which will permit sellers of construction services to refer to current costs of labor and materials in pricing their individual services. This regulation, therefore, is issued to meet the specific needs of the construction industry."

Equipment Ceilings. CPR 105, to control sale prices of used construction machinery and equipment, was issued by OPS in December. A revision of that order to conform more closely to industry practices, and a tailored regulation for rental of new and used machinery are being considered by OPS with the equipment manufacturing and distributing industries.

CONTRACTS AND SPECIFICATIONS

The principles of contracting for the federal government were upset by the United States Supreme Court decision in the Wunderlich case in November. The association has taken the lead in seeking remedial legislation in Congress.

Throughout the year the association has continued studies on government and private contract documents, bidding and administrative procedures and specifications for the purpose of recommending improvements when necessary.

Disputes Clause. Earlier this month the association testified before Congress on the principles it had recommended for legislation to offset the Supreme Court decision and permit judicial review of disputes arising from federal construction contracts. Principles recommended were:

- That any government contract, regardless of the language of the contract itself, be subject to appeal to appropriate courts from rulings of the contracting officer or department head on matters of law and fact.
- That existing contracts be modified accordingly.
- That disputes in process between the time of the decision and effective date of the legislation be treated according to provisions of the legislation.

The Supreme Court had interpreted Article 15, the disputes clause of the standard government contract form,

to mean that rulings of the department head on matters of fact were subject to judicial review only in cases where fraud on the part of the government could be alleged and proved. Fraud was limited to mean: "conscious wrongdoing, an intent to cheat or be dishonest."

The A.G.C. wrote to the chairmen of the Senate and House Judiciary Committees on January 5 recommending the principles for legislation. Conferences were held with the chairmen and staffs of the committees, and the General Accounting Office.

The Supreme Court, in its decision, declared that if the rule as established was too limited, that was a matter for Congress. The A.G.C. has stressed the need for legislation as soon as possible. The principles recommended are those for which the association has stood for many years.

Form 23. The mobilization program has delayed completion of work which has been carried on for nearly three years on possible revision of Form 23, the standard federal construction contract. Recommendations have been made by an industry group including the A.G.C. A government committee is now completing work. The A.G.C. has protested its latest draft. Completion of the contract probably will await action by Congress on legislation relating to the Wunderlich case.

Army Contract. Earlier in the year A.G.C. recommendations led to revision of certain provisions in the Army construction contract form which were unworkable or unfair to contractors.

Contract Renegotiation. Regulations are anticipated next month which put into effect the Renegotiation Act of 1951, which had been enacted last March. Generally, most federal construction contracts are covered by the regulations for the present.

In December A.G.C. representatives conferred with members and staff of the Renegotiation Board to recommend policies for handling certain construction contracts which would be of benefit to the industry and the government. It recommended regulations to exempt construction contracts not directly related to the national defense, which were awarded as a result of competitive bidding after public advertisement, and for overseas work.

It also recommended that contractors be given the option of how their contracts were to be renegotiated, and that consideration be given to the other renegotiable business of partners of a joint venture when that particular contract is renegotiated.

Realizing the need for prompt action to issue the basic regulations required to make the act effective, the A.G.C. has recommended that the regulations be considered subject to amendment and amplification after time has been



Three of these "Cat" Diesel DW20 Tractors with No. 29 Scrapers haul 3,000 yards of earth a day. Average trip, 1.8 miles; average round-trip time, 9 minutes.

How Oakland tackles traffic problem

"Caterpillar" Diesel No. 12 Motor Grader leveling fill dirt on the Eastshore Freeway project. ↓



"Cat" Diesel D8 Tractor with No. 85 Dozer pulls No. 28 Ripper on the Eastshore Freeway, under construction near Oakland, Calif. ↓



Scheduled for completion next month, a new 4.2-mile addition to California's Eastshore Freeway will relieve pressure on traffic in the busy Oakland area. This latest section of the Freeway is being built by Fredrickson & Watson, Oakland.

When finished completely, the Freeway, begun in late 1947, will carry traffic from Vallejo to San Jose and will permit a speed of 55 miles per hour within a few blocks of Oakland's business district.

325,000 yards of earth had to be moved in the 4.2 miles now being completed, with 26,000 yards of concrete pavement and 8,700 yards of concrete over-structures poured.

"Caterpillar" Diesel Tractors, Scrapers, Motor Graders, Bulldozers and a Diesel Engine are being used by Fredrickson & Watson to speed completion of the project. Speaking recently of the "Cat" Diesel DW20 Tractors in particular, Construction Superintendent K. Poss said, "We purchased the first DW20s on the West Coast because of 'Caterpillar's' reputation and service rendered on other equipment. We like them and they are performing the kind and amount of work we anticipated. Their ease of operation for size, and their speed, make them the best yet."

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Big Red



TIGHT TURN AT THE TIP of old Cape Cod, a big International TD-24 crawler with a 21-yard heaped-capacity scraper wheels around to start another 1,800-foot haul on the new Mid-Cape Highway extension, near Truro, Massachusetts.



takes the Cape

Makes tracks near Truro on sand-slowed highway job

Out near the tip of Cape Cod, where the Pilgrims saw their first tracks of redskins in the sand, today's tourists see the tracks of big red Internationals.

They're extending the Mid-Cape Highway, and where the land isn't sand, it's bog and marsh. It's so bad the S & M Construction Company, of Providence, R. I., won't let many of its vehicles venture off the pavement. But the Internationals charge ahead, moving nearly half-a-million cubic yards of sand to build three miles of road.

Pride of the whole show is "Big Red"—the TD-24—pulling bigger loads faster than any other crawler can.



And here's what an S & M operator says about it: "I wasn't on this rig very long before I found out it was mighty nice to handle. I really pull plenty of dirt!"

"Big Red", with 148 maximum drawbar horsepower and up to 7.8 mph, has more power and speed than any other crawler on the market. And it has finger-tip maneuverability to make pivot turns, feathered turns, and turns with power on both tracks.

All this means a faster work-cycle and more paydirt moved per day.

Ask your International Industrial Distributor for details on the TD-24. Ask him, too, about his fast, ready service and speedy parts delivery. Get all the answers . . . and you'll be a TD-24 man from then on in!

INTERNATIONAL HARVESTER COMPANY, CHICAGO 1, ILL.



BIG RED EQUIPMENT. Here are three of the five Internationals on this job, dozing and hauling the loose, shifting Cape Cod sand. In some bogs, peat has to be replaced with sand, and 50-foot piles driven in for stability of the roadway.

INTERNATIONAL

POWER THAT PAYS



Side-Step Trouble

with these three "NO'S" in
BARNES "33,000 for 1" PUMPS



NO SOFT SPOTS TO WEAR ON WATER SEAL

The two wearing parts on the Barnes Super Seal are hardened steel. You have steel on steel. There are no soft spots to wear. Since the grease seal is automatically lubricated, pump can be run dry without damage to either pump or seal.



NO RE-CIRCULATING CHAMBER TO CLOG

Barnes "33,000 for 1" Pumps do not have either a re-circulating chamber or port. Cement-water, stones, twigs, leaves and such will not clog the pump.



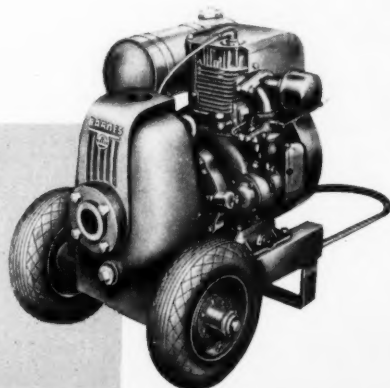
NO COSTLY REPAIRS TO KEEP PUMP VOLUME UP

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available for study of the A.G.C. recommendations with other government agencies.

Defense Projects. Last April A.G.C. representatives met in Washington with Army, Navy, Air Force and Atomic Energy Commission officials to discuss possible means of minimizing the impact which defense projects might have on industry conditions.

Government officials recognized the disruptive influences of large defense projects with high-speed schedules on conditions in the area. While there are no simple solutions to the problems, the discussions were mutually beneficial.

Private Contracts. Certain changes in both the fixed price and fixed fee standard contract forms of the American Institute of Architects have been agreed upon by the A.I.A. and the A.G.C. and have been incorporated in the Sixth Edition of those forms.

Modifications also have been made in the standard form of engineering contract and questionnaire by committees of the American Society of Civil Engineers and the A.G.C.

Work of task units of the A.G.C. Committee on Contract Forms and Specifications will be reported elsewhere. The committee met before the convention to consider its program.

Bonds. Earlier the A.G.C. testified before a Congressional committee recommending that federal agencies take the lead in adhering to standardized and equitable procedures for bid bond requirements when bids are submitted.

The Executive Committee considered the question of the percentage which should be required for performance bonds, and decided this was a matter for decision by awarding agencies rather than contractors.

EQUIPMENT AND REPAIR PARTS

Necessity for the production and distribution of adequate supplies of repair parts to keep existing machinery in operation until new equipment is available has been stressed by the A.G.C. during the year.

Necessary contacts on equipment matters have been maintained with the government, Construction Industry Manufacturers Association, and Associated Equipment Distributors. While contractors should not expect to secure quantities of new equipment this year, no insurmountable problems are foreseen now.

More equitable compensation for contractor-owned equipment on defense fixed-fee contracts has been advocated by the association in line with the resolution of the last convention expressing disapproval of the Department of Defense formula.

Equipment Manual. In August the A.G.C. published an Addendum to the Foreword of its *Contractors' Equipment Ownership Expense* manual calling attention to differences between the purchase price and replacement cost of equipment in computing ownership expenses.

During public hearings on the tax bill in July the A.G.C. recommended a provision to permit the contractor to treat as a net operating loss, subject to the carry-back and carry-over provisions of the revenue code, an amount representing the excess of the replacement cost of equipment over the original cost of the same type of equipment actually replaced in the year it becomes fully depreciated, or prior thereto.

Tailored ceiling price regulations for equipment rental and sale of new and used equipment are now being drafted or amended by OPS in consultation with the manufacturing and distributing industries.

Work on the standardization of sizes and capacities and the improvement of machinery continues through the Mixer Manufacturers' Bureau and the Contractors' Pump Bureau, both affiliated with the A.G.C.

LABOR RELATIONS

Inflation, shortages of workmen, impact of defense construction, union activities, and greater government control of employer-employee relationships were intensified during the year to bring the association its greatest opportunity to assist chapters and members through the labor service.

Results will show that A.G.C. members were the best informed in the industry on labor matters in most communities, and that general contractors had appropriate representation on the boards, commissions, committees and conferences which administer or guide the policies on controls or methods of avoiding work stoppages.

Wage Stabilization. After the wage stabilization program was put into effect by the Wage Stabilization Board the association was successful in having the Construction Industry Stabilization Commission established to handle the program in construction, although it was contrary to WSB policy to establish special boards. All the prestige and influence of the A.G.C. was necessary to secure establishment of this commission which has been essential to properly conduct the wage stabilization program in construction.

The association is represented on CISC, and has assisted in development of its policies and procedures. The association has established a special department in its headquarters office to advise chapters of action on cases, and to keep commission members supplied with necessary information on cases they will consider.

CISC was working to determine its 1952 policy on wages and its adaptation for construction of the WSB

program for health and welfare benefits while this report was being prepared.

Working Conditions. Negotiations were held over a period of months by government contracting agencies, the A.F.L. Building and Construction Trades Department, and national contractor associations for the purpose of establishing a no strike policy and the stabilization of working conditions on defense projects. The negotiations were terminated after WSB was finally established to administer the wage stabilization program only without powers to hear dispute cases.

Prevailing Wages. Increases in the number of defense projects and extension of the minimum wage provisions of the Davis-Bacon Act to federal-aid airport, hospital, housing and rural electrification construction has brought about a twenty per cent increase of A.G.C. work in sending notices of wage determination requests and determinations by the Secretary of Labor to chapters. Determining prevailing rates has been complicated recently by the payments of premiums above agreement rates in some areas.

Some A.G.C. recommendations were adopted when the Secretary of Labor amended regulations last year for administration and enforcement by federal agencies of labor standards provisions for projects where the work was financed in whole or part by the federal government.

Taft-Hartley Act. Provisions of the Labor-Management Relations Act still do not permit construction employers the privileges enjoyed by employers in other industries. An amendment to the act passed last year makes no difference to construction employers. Efforts are likely to be made at this session of Congress to bring certain amendments to a vote, primarily for the purpose of recording the position of candidates for reelection on such legislation.

Jurisdictional Board. The National Joint Board for the Settlement of Jurisdictional Disputes has been continued for another year. International unions and other employers' associations determined to continue the board even though the electrical workers union and National Electrical Contractors Association withdrew, at least temporarily, when their jurisdictional demands were not met.

As in all mutual efforts to work under common rules, efforts have been made to evade determinations or to take advantage of imperfections of the plan. Yet the board has been successful in drastically reducing work stoppages caused by jurisdictional disputes. The A.G.C. continues to be represented on the board.

The men who have been part of the commissions, boards, committees, or other negotiations to establish and

administer sound labor policies in construction deserve the commendations of the industry.

The Labor Committee held a day-long meeting prior to this convention to thoroughly review developments and make recommendations for A.G.C. policy.

ACCIDENT PREVENTION

A new emphasis has been placed on accident prevention activities which enables members to take advantage of their own experiences and those of others to develop more effective safety measures on their own projects.

The association's program has continued to develop many practical suggestions for members to use so that workmen can take better care to avoid accidents, and so that construction costs can be reduced.

Increased interest has been taken by members, as demonstrated in part by the increase of more than 25 per cent of those who filed reports on their accidents above any preceding year. The severity rate for 1951 reports showed a significant decrease to an average 2.89 lost days per 1,000 man-hours worked from the 3.15 rate for 1950.

There was greater participation in the safety program by chapters and branches than ever before, and the Liaison Committee of the A.G.C. Secretaries' and Managers' Council has been helpful in this respect.

Throughout the year a greater volume of work than ever before has been devoted to the ten-point association accident prevention program which was adopted at the last convention.

Cooperative Work. An important part of the work has been undertaken in cooperation with other groups. A score of A.G.C. representatives have taken an active part in work of the Construction Section of the National Safety Council.

Three meetings have been held of the Joint Cooperative Committee maintained with the Associations of Casualty Insurers, in which the direct and indirect costs of accidents have been studied, development of more visual material on construction safety has been stimulated, and work of the association and surety companies on safety has been coordinated.

Representatives of the national association and the chapters have participated in the President's Conference on Industrial Safety and conferences held by state governors. Association members also have participated in work of the American Standards Association on safety codes.

Efforts can be expected at this session of Congress to secure enactment of a federal safety inspection law which would permit federal inspectors to investigate the compliance with safety codes on all industrial sites

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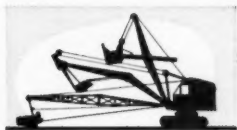
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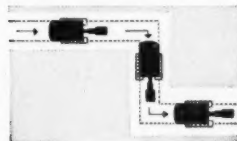
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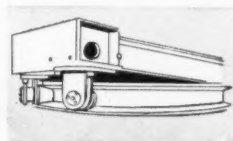
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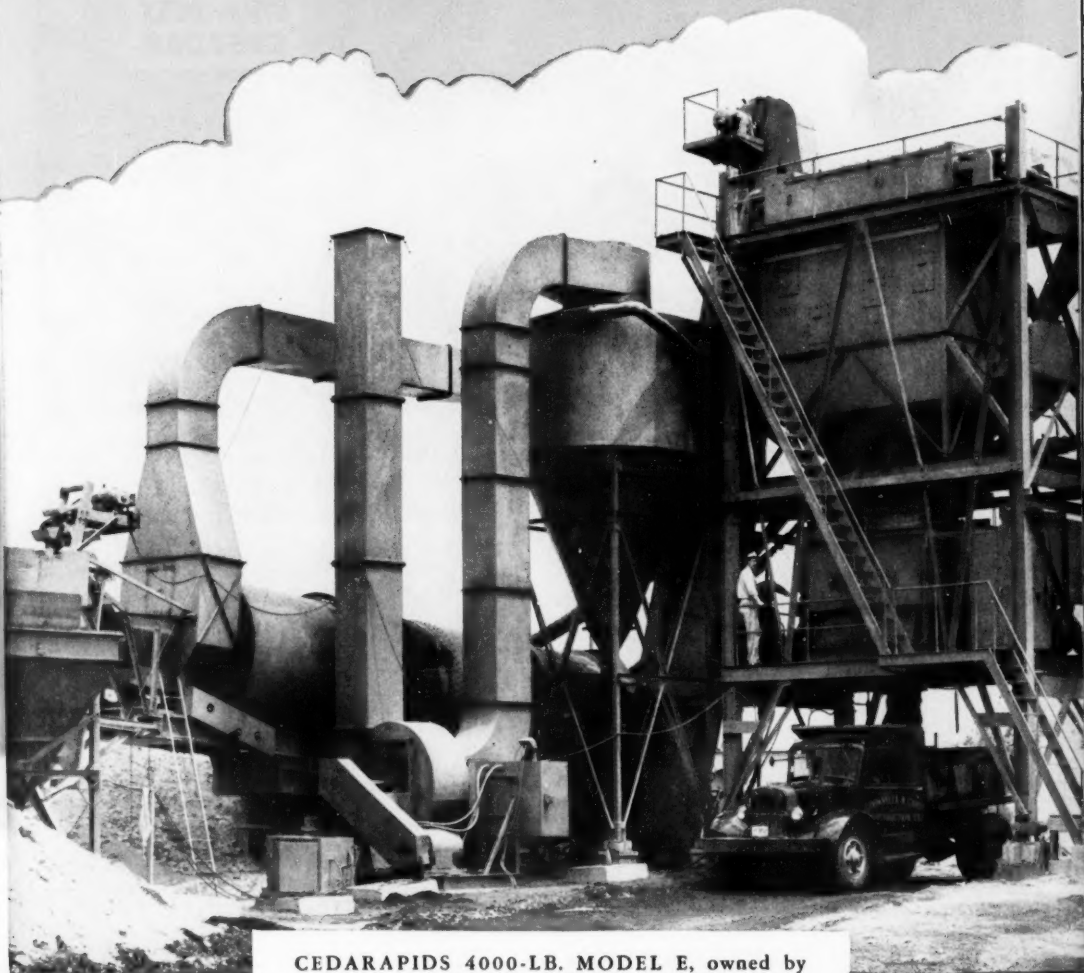
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including construction. The association has opposed such legislation previously on grounds that this is a matter for states, and that industry voluntarily could carry out more effective safety programs more economically than could be done by federal regulation.

Accident Manual. Fourteen different inexpensive pocket-sized reprints of sections of the *Manual of Accident Prevention in Construction* were published by the association earlier this month so that they can be used easily on jobs by superintendents, foremen, workmen and other employees of general and subcontractors.

Each section of the manual outlines recommended safe practices for a wide variety of construction operations. Each reprint contains from one to six appropriately grouped sections. The material and page numbers of the reprints are generally the same as the manual, which has been approved as an industry standard by the American Standards Association.

The complete manual is useful in offices where construction operations are planned. The reprints are particularly useful on jobs where foremen and workmen can have those for the particular kind of work in which they are engaged.

Editorial support to the association's program has been given by *THE CONSTRUCTOR*, which received a Public Interest Award from the National Safety Council. An award will be given at this convention to the chapter showing the greatest advance in its program.

The Accident Prevention Committee met prior to this convention to give further study to the program.

BUILDING CONSTRUCTION

The principal function of the Building Contractors' Division is to secure information and take appropriate action on matters of particular interest to building contractors.

Two afternoons will be available at this convention for discussions and recommendations by builders on their particular problems.

During the past year there has been a big increase in the volume of industrial construction, with a general decline of other types of building except defense work. This year the general prospects are similar, with activity varying between areas.

Whenever it has become necessary, the association has supported use of the contract method and the award of a single over-all general contract. Drives for the award of separate mechanical contracts have been conducted locally but seem to have subsided nationally.

Cooperative Work. The American Institute of Architects, through cooperative committee work with A.G.C., has made revisions in its Standard General Conditions (Form A-2) used in connection with their standard

fixed price and fixed fee contract forms. After approvals by both organizations these have been published in the Sixth Edition of the A.I.A. contract documents. Important changes were made in the fee form of contract centralizing more responsibility in the general contractor.

The A.I.A.-A.G.C. national Joint Cooperative Committee met in Washington last September to consider matters of mutual interest. Its discussions and recommendations are reported to members.

The initial meeting of the Joint Cooperative Committee of the Producers' Council and A.G.C. was held in Washington last September. This committee was established to provide a means for the exchange of information and ideas of mutual interest between the materials manufacturers and general contractors. Another meeting was held prior to the convention.

Apprentice Training. An important fact is that the number of apprentices in training has fallen off to an estimated 90,000 throughout the country.

The Federal Committee on Apprentice Training, for all industry, and the General Committee on Apprenticeship for the Construction Industry have recommended to the Selective Service System that bona fide apprentices with six months' or more training be deferred until completion of their apprenticeship upon certification by joint apprenticeship committees, employers, or other appropriate authorities. A.G.C. is represented on both committees. Favorable action is expected soon.

Many A.G.C. chapters have conducted excellent training programs, as well as graduation exercises and contests which serve to attract men to the programs. The A.G.C. Apprenticeship Committee met prior to the convention to consider means of increasing training programs.

Research. The A.G.C. continues to support the Building Research Advisory Board of the National Research Council. BRAB is now conducting a study of conservation of scarce materials in building construction, with particular emphasis on federal building. The A.G.C. has appointed six building contractor members for consultation. Several association members helped to conduct a conference held in August at the Massachusetts Institute of Technology on pre-stressed concrete, of which A.G.C. was one of the sponsors.

Modular Coordination. Members have reported difficulty with the modular coordination method of designing and building structures, particularly in cases where part of the design and materials are modular and part of traditional design and sizes.

The results of a survey of building members giving examples of the difficulties encountered were published in the November and December issues of *THE CONSTRUCTOR*. Space in the magazine for comment has been of-

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For Human Occupancy Buildings, light manufacturing plants, many other structures using any framing.

Saves Men because less time and labor are required to provide open wood centering and form work.

Saves Money by saving concrete . . . the "dead load" is kept at a minimum. Also, less lumber is used.

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For Human Occupancy Buildings and roofs of industrial plants using steel or masonry framing.

Saves Men because steel joists are light and easy to install. Special equipment is not required.

Saves Money because steel joists are self-centering. Concrete form work rests directly on the joists.

Saves Material because the "dead load" is amazingly low. Beams, columns and footings weigh less.



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Meyer Steelform Construction uses little steel, provides long spans, maximum manufacturing area free of columns.

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ferred to the A.I.A. and Producers' Council. Articles will be run in later issues.

Advance Planning. The period when building operations are at less than capacity provides an excellent opportunity for the advance planning of projects which are postponed until materials are available. The advance planning of projects needs encouragement.

HIGHWAY CONSTRUCTION

The nation's highway construction needs are tremendous. Ever since the end of the war construction has not kept pace with the deterioration of highways and increasing traffic. The defense effort accentuates the need for highway work.

A survey completed by the American Association of State Highway Officials on December 31 revealed that \$32 billion of construction is needed on state systems.

The principal function of the Highway Contractors' Division has been to take appropriate action and secure information on matters of particular interest to highway contractors.

Two afternoons during the convention will be available for discussion of highway problems. One of them will consist of an open meeting with the Joint Cooperative Committee maintained with the American Association of State Highway Officials.

Federal Aid. A major problem facing the highway construction industry and highway users is that the President has recommended a 20% reduction in federal aid highway expenditures from the past and current fiscal years to \$400 million in the next two fiscal years.

Earlier this month A.G.C. representatives testified before the House Public Works Committee on bills for the federal-aid highway authorizations for the two future fiscal years. The A.G.C. presented information on the capacity of contractors to execute a fifty per cent larger volume of work, and on conditions being experienced.

Highway officials and users have been active during the year in calling to the attention of mobilization agencies the necessity for greater amounts of steel for highway construction. Rubber, equipment and automotive manufacturers are to be commended for their activities to bring the necessity for highway construction to public attention.

Competition Keen. While construction costs have increased slowly, competition has continued keen to assure public agencies of full value for their highway construction expenditures. More highway departments are finding it economical to carry out more maintenance and repair operations by contract.

Close contact has been maintained by the A.G.C. with the Bureau of Public Roads and the A.A.S.H.O. Since the last convention meetings of the Joint Cooperative Committee have been held at Omaha, in connection with the A.A.S.H.O. annual meeting; and at Atlantic City,

Chicago, Charleston, S. C., and San Francisco in connection with regional highway officials' meetings. Additional meetings will be held next month at Atlantic City and Chicago.

Among projects considered at these meetings have been long-range plans, maintenance by contract, improved specifications and awarding procedures, public relations, termination clauses, financing, more steel for highways, increased pay for highway engineers and securing more engineers for planning.

Aviation Officials. Airport construction is being limited principally to projects essential to national defense. Cooperation between aviation officials and the A.G.C. has been maintained through the Joint Cooperative Committee of the association and the National Association of State Aviation Officials, which met in October in connection with the N.A.S.A.O. annual meeting, and again at this convention.

During the year an amended contract policy has been adopted by the Rural Electrification Administration, which is lending funds to local groups for a substantial amount for construction.

The association continues to support the Highway Research Board of the National Research Council.

HEAVY-RAILROAD CONSTRUCTION

The volume of heavy and railroad construction is expected to continue at high levels this year with defense work offsetting declines in civilian work. Last year slightly more than a quarter of the \$80 billion in new construction was in heavy projects.

The Heavy Construction and Railroad Contractors' Division has continued to secure information and take action of particular interest to heavy contractors. Two afternoons at this convention will be available for discussion of their particular problems.

Problems of contracts for projects of long duration have been considered during the year, and will be discussed further at the convention. Last April A.G.C. recommendations led to revision of certain provisions of Army contract form T-ENG 5580, which were continued when Form 5580 was superseded by Form 5701. The major change was to delete a section which would have empowered the contracting officer to make final decisions on all disputes concerning questions of fact and "disputes which may arise under the plans and specifications attached thereto."

Task Units. Task units of the A.G.C. Committee on Contract Forms and Specifications concerned with heavy construction have continued their work with government agencies. In December the first meeting was held by one unit with the Navy Bureau of Yards and Docks, at which various recommendations were made.

Another unit has held two meetings with the Army Corps of Engineers with results of benefit to both groups. Still another has maintained close contact with the Bureau of Reclamation. During the year a unit was established to concern itself with specifications and problems of particular interest to municipal contractors.

The association has sought revision of the rates established by the Department of Defense for compensation for contractor-owned equipment on defense projects. A Corps of Engineers representative will be at the convention to discuss this subject.

A.S.C.E. Cooperation. Close cooperation has been maintained with the American Society of Civil Engineers, and the Joint Cooperative Committee of the two organizations has met in June and earlier this month in Washington and last September in Chicago in connection with the A.G.C. Board Meeting. Committees of A.G.C. and A.S.C.E. have completed recommended revisions of the standard form of engineering contract and questionnaire which has not been changed since 1925.

The policy of the Army in inviting alternate designs in bids for Air Force and other military construction has been discussed with the Corps of Engineers by the association and protested.

NATIONAL LEGISLATION

This session of Congress is expected to be relatively short, with many actions taken in consideration of the November elections. Little important legislation aside from necessary appropriations is likely to be enacted.

In accord with its established policy, the A.G.C. will continue to present factual information to committees of Congress on how proposed legislation will affect the general contracting industry. Through adherence to this policy the A.G.C. has increased its prestige in Congress.

Wunderlich Case. As reported earlier, testimony on behalf of A.G.C. members was presented to the Senate Judiciary Committee this month on principles recommended by the association for legislation to offset the Supreme Court decision in the Wunderlich case. President Maxon and Vice President Horner attended the public hearing to support the association's recommendations.

In January the association had written to the chairmen of the Senate and House Judiciary Committees calling attention to the effects of the court decision, and to the need for legislation as soon as possible. Both chairmen have sponsored bills for this purpose. The hope is that action will be taken soon on this legislation so that it is not crowded off the calendars in the rush to adjourn.

Highway Bills. Another important action this month was the presentation of information to the House Public Works Committee on the pending federal aid highway

bills. A.G.C. presented information on the capacity of highway contractors to handle a greater volume of work and on industry conditions.

Transportation Tax. Congress accepted an A.G.C. recommendation in enacting the latest tax bill by including a section to amend Section 3475 of existing law on the transportation tax by adding: "The tax imposed under this section shall not apply to the transportation of earth, rock, or other material excavated within the boundaries of, or adjacent to, the boundaries of such project."

The A.G.C. had presented recommendations both to the House and Senate committees handling this legislation. It had also made recommendations to the committees which prepared the excess profits tax act and the Renegotiation Act of 1951.

Testimony also was presented to a subcommittee of the House Armed Services Committee investigating contract awarding procedures for defense projects. The committee report was critical of the waiving of bid bonds for some of the bidders.

The association previously has recommended favorable action to establish a War Damage Corporation similar to the one during World War II. The association also had supported legislation passed by Congress, but vetoed by the President, to clarify the delivered price question. It is doubtful that action will be taken on such bills this session.

Various amendments to the Taft-Hartley labor-management act may be proposed this session, with efforts made to bring them to a vote so that the position of Congressmen can be recorded. A drive is also likely to enact a federal safety inspection bill. Such legislation would permit federal inspectors to inspect construction projects, as well as manufacturing plants, mines, and other industrial sites, to enforce regulations.

The A.G.C. Legislative Committee met before the convention to consider the A.G.C. legislative program.

NATIONAL DEFENSE

Expenditures of \$3.6 billion for defense construction for the fiscal year starting July 1 were recommended by the President in the annual budget. Expenditures for the current fiscal year are expected to total \$2.8 billion.

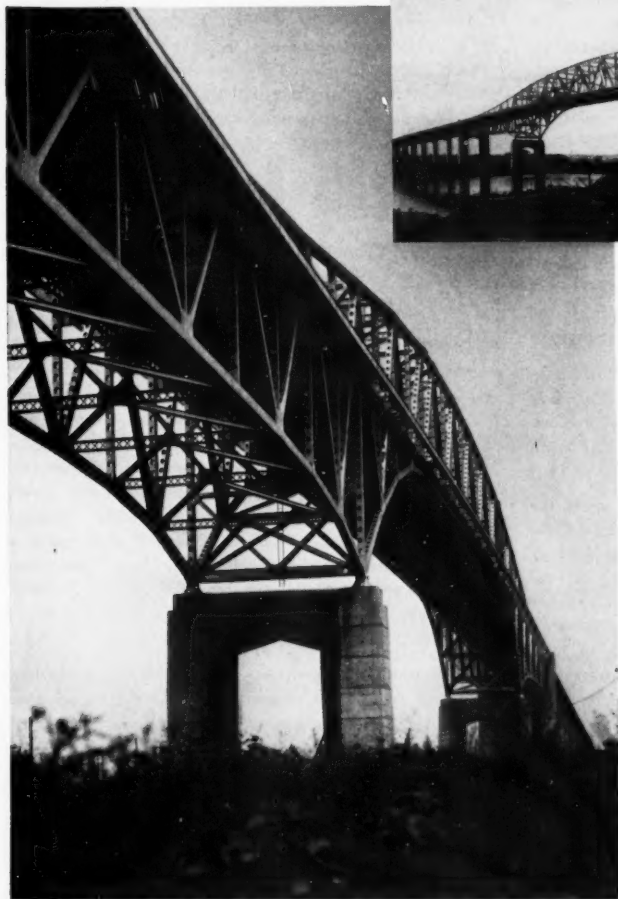
Defense construction is being executed by contract, and most agencies have continued the policy of awarding all possible contracts by competitive bidding after public advertisement, as has been recommended by the association.

The A.G.C. has discussed with the armed services the impact which defense projects constructed at high speeds can have on conditions in the area. When the



This closeup shows start of erection of a cantilever truss span over main river pier, without use of falsework.

New Bridge Over Schuylkill at Philadelphia



Penrose Avenue Bridge helps to speed traffic between Philadelphia and Chester. Owner: Commonwealth of Pennsylvania, Department of Highways. Consulting Engineers: Modjeski and Masters, Harrisburg, Pa.

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FABRICATED STEEL CONSTRUCTION

THE CONSTRUCTOR, MARCH 1952

This long, graceful structure, recently completed in Philadelphia, stretches its steel fingers across the Schuylkill River a short distance above its confluence with the Delaware River. It is called the Penrose Avenue Bridge, and it was built to ease traffic congestion between Philadelphia and Chester. The bridge replaces a former swing span which had been so severely damaged by a passing ship as to be rendered useless.

This new giant among eastern bridges is a high-level cantilever bridge, its steel construction being 7876 ft long. It stands 148 ft above mean low water. The main channel cantilever span consists of two 340-ft anchor arms and a 680-ft central span. The approaches to the bridge are of continuous plate-girder construction, each approach consisting of 27 spans.

The bridge is 61 ft wide, and has a 4-lane roadway, divided by a 3-ft median strip, and two 5-ft sidewalks.

The superstructure for the Penrose Avenue Bridge, weighing 14,892 tons, was fabricated and erected by Bethlehem.



mobilization program started in 1950, the association's National Defense Committee immediately conferred with defense executives on the policies and procedures to be followed.

Affiliated Units. Since 1947 A.G.C. chapters and branches have cooperated with the Corps of Engineers in sponsoring and training reserve construction units in the Army Affiliation Program in which each man is specially qualified for his military assignment by his civilian work.

The 439th Engineer Construction Battalion, sponsored by the Kansas Contractors Association, and the 453rd Engineer Construction Battalion, sponsored by the Spokane Chapter, have performed outstanding engineering feats in Korea.

More than 75 units have been sponsored and more than 15 have been called to active duty. The Chief of Engineers has asked the association to increase its quota to 96. Other units may be sent overseas in the near future.

Conferences have been held with the Chief of Engineers and other officers to emphasize the importance of keeping the units intact after they have been called to duty, and the association has been assured that the Corps will do everything in its power to maintain their integrity.

Seabees. Cooperation has continued with the Navy Bureau of Yards and Docks to help secure qualified men for the Seabees, which recently celebrated their tenth anniversary.

Civil Defense. For approximately three years the association has been cooperating with the Federal Civil Defense Administration in planning for and making most effective use of general contractors in the civil defense program. FCDA has recommended to mayors and other local officials that A.G.C. representatives be invited to assist in local civil defense surveys.

The A.G.C. developed a great amount of information for use by FCDA in preparation of a manual on engineering services for guidance of local officials. A demonstration of how general contractors and A.G.C. chapters can assist in the relief of disasters was given last year during the floods in the Kansas, Missouri and Oklahoma areas.

INDUSTRY RELATIONS

The association's program for improving the relationships between associations in the industry was expanded during the year. Experience has demonstrated that good relationships lead to greater construction efficiency.

Since the last convention 20 meetings have been held by joint cooperative committees which the association

maintains with other associations and professional societies in the industry. These committees serve as a medium for the interchange of information and ideas on matters of mutual interest. They make recommendations to the respective organizations for improvements of industry conditions.

The latest committee formed during the year was with the Producers' Council, composed of the principal manufacturers of building materials. Organizations with whom committees are maintained are:

- American Institute of Architects
- American Society of Civil Engineers
- American Association of State Highway Officials
- National Association of State Aviation Officials
- Construction Industry Manufacturers Association
- Associated Equipment Distributors
- Producers' Council
- Surety Association of America
- National Association of Mutual Casualty Companies
- Association of Casualty and Surety Companies

Other Cooperation. Other national organizations with which the A.G.C. cooperates include:

Eight national associations of specialty contractors and the Building and Construction Trades Department, A.F.L., in operation of the National Joint Board for the Settlement of Jurisdictional Disputes.

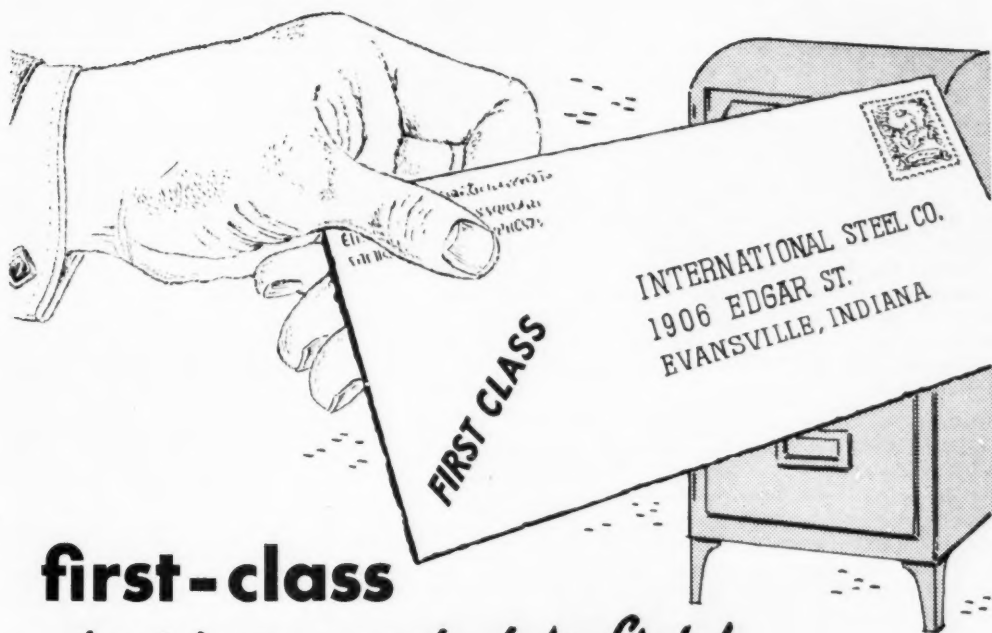
National Safety Council, American Society for Testing Materials, American Standards Association, American Municipal Association, Bureau of Contract Information, Construction and Civic Development Department of the Chamber of Commerce of the United States, Construction Industry Advisory Council, American Trade Association Executives, National Association of Manufacturers, National Highway Users Conference, American Concrete Institute, and the Building Research Advisory Board and Highway Research Board of the National Research Council.

Chapter Relationships. Many of the chapters have formed cooperative committees or other close relationships with various groups in their areas. Such work has been of benefit to members, the industry, and the public.

PUBLIC RELATIONS

Because public relations techniques are used to make all activities of the association more effective, the year of the association's greatest activity has brought a corresponding increase in public relations work.

At the same time steady progress has been made on most phases of the association's coordinated public relations program, designed to improve relations with all segments of the public for general contractors, which was adopted originally in 1947.



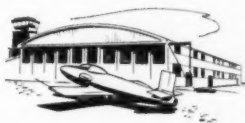
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The mobilization program accentuated the need for keeping members and chapters completely and promptly informed of industry developments and A.G.C. actions. There is evidence that A.G.C. members have been better and more promptly informed than any others in the industry.

Chapters have become the principal source of construction information in their communities, and this has served to increase their effectiveness and their prestige. During the past year more information has been sent to members and chapters than in any comparable period in the past.

National News-Letter. Since June 1949 the *National News-Letter* has served as a means of informing members concisely, accurately and promptly. During the year an average of two letters a month have transmitted information on all important industry developments and A.G.C. actions. Stress has been placed on the accuracy and reliability of the information.

Since the start of the mobilization program 90 Defense Bulletins have carried the texts or other important information on government actions to the chapters and others. Other bulletins have supplied chapters with complete details on important matters.

THE CONSTRUCTOR. THE CONSTRUCTOR's value continues to increase as an important medium for transmitting information. Constant improvement has been made in its editorial content. There is evidence of careful reading by members and others. Its circulation and advertising have continued growing. During the year its editors became members of the Society of Business Magazine Editors.

The magazine is distributed to all architectural and engineering schools, to other national associations in the industry, to federal, state and local public officials, to industrial, architectural and engineering firms, and to others interested in the information which general contractors want. This circulation helps to enhance the prestige of association members.

Other Documents. Pocket-sized reprints of the *Manual of Accident Prevention in Construction* were published earlier this month for use on jobs by superintendents, foremen, and workmen of general and subcontractors. These reprints were designed to be of assistance in the association's safety program, as described in the Accident Prevention section.

A revised edition of the booklet, *Organization and Work of the A.G.C.*, is being distributed to members and to others interested in the association. A large number of documents are necessary for carrying out association work. In their publication the association is assisted by the Lewis Edwin Ryan agency, which also handles the association's advertising. High quality is secured at maximum economy.

Advertising. A small program of paid advertising has been continued as the most economical method of transmitting a brief message to large groups of people. The advertising has been directed primarily toward those influential in the award of construction contracts. The latest advertisement tells of the major contributions which general contractors make to the nation and its communities.

Through press releases and other activities information about A.G.C. actions was carried to large audiences through newspapers, and radio broadcasts, as well as through magazines.

Chapter Public Relations. Latest expansion of public relations activities has been directed toward providing greater assistance to chapters in their public relations programs. There have been increasing requests from chapters for assistance in expanding their activities.

The complexities of such work have been studied during the year, and work toward that end has been initiated in cooperation with a Liaison Committee of the Secretaries' and Managers' Council. The national staff is being expanded for this purpose.

The Public Relations Committee met prior to the convention to give further study to the subject.

CONCLUSION

This report covers the period of greatest activity in the association's history.

During the year the industry was subjected to a greater amount of government control than for any similar period since the war years.

Yet in 1951 the construction industry executed its largest dollar volume of new construction and maintenance and repair operations, which exceeded the value of agricultural production.

The A.G.C. took constructive action on each of the major events of the year affecting the industry, and performed work of benefit to members, the industry, the government and the public.

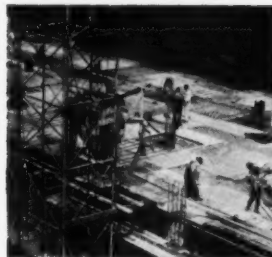
At the same time the association expanded many of its normal activities which are directed toward long-range improvements in the industry's capacity to produce efficiently and economically.

This work could not have been accomplished if the association had not carried out its work for the past 33 years in such a manner as to establish a sound reputation and secure recognition for the prestige and integrity of A.G.C. members.

The achievements of the past prepare for the work of the future. Members of the association attending this convention will have the opportunity to make their recommendations for the association's future actions.



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CT-2

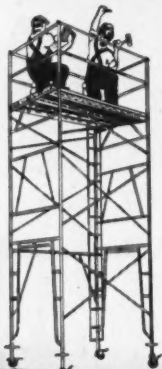
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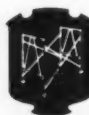


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ACCIDENT PREVENTION

A.G.C. Contractors Win Safety Honors

• New Records Set in 1951 Accident Prevention Drive

» ONE HUNDRED and twenty awards for exceptionally fine performance in accident prevention were made to member firms and chapters of The Associated General Contractors of America in Detroit last month.

The 33rd convention of the construction association honored a record number of participants in the 1951 accident prevention program. Safety Director Harry J. Kirk noted a 25% increase in the number of contractors cooperating in the industry drive to cut down accidents.

Construction firms honored were those with the best one-year, five-year and ten-year records. Also recognized were six chapters which had high percentages of their memberships participating in the program.

Milwaukee, Penna. Chapters Lead

The Milwaukee Chapter, with 26 members, led the field with 100% participation. Robert C. Johnson is chapter president. Second place in the smaller chapter classification went to the Dallas chapter for over 88% participation, and the Ohio Highway chapter took third prize for 56% participation.

Among the larger chapters (those having over 35 members), the Pennsylvania Builders Chapter took first prize. The chapter, which has 42 members, reported 67% participation. The Michigan Road Builders Association reported 61 of its 116 members participating to win second place. The Detroit Chapter took third place.

Best 10-Year Records

Six construction firms won high honors in the accident prevention contest for the best 10-year records. In the heavy construction field, the Maxon Construction Co. of Dayton, Ohio, took first prize with a low frequency rate of 13.36, although the firm's exposure ran over 61 million man-hours. Second place went to the Holmes Construction Co. of Wooster, Ohio, and third place to the Dravo Corp., of Pittsburgh. Both the Maxon firm and Dravo Corp. were prize winners last year.

In the building construction field, H. B. Alexander & Sons was awarded first prize; the Martin L. Bauer Construction Co. of Middletown, Ohio,

second prize; and Woermann Construction Co. of St. Louis, Mo., third prize.

Best Five-Year Records

Thirteen construction companies were credited with awards for the best five-year records. The field was divided into two groups—those firms with more-than-average exposure and those with less-than-average exposure (The average exposure this year was over 2.1 million man-hours).

Three building firms—Kroening Engineering Corp. of Milwaukee, A. L. Jackson Co. of Chicago and Ritter Brothers of Harrisburg, Pa., placed in that order in the competition among firms recording more-than-average exposure.

In the less-than-average exposure group, building, highway and heavy construction firms vied for honors. Of the building firms reporting, the best five-year records were submitted by Bauer-Shoeneck Construction Co. of Milwaukee, R. S. Noonan of York, Pa., and Thomas H. Bentley & Son of Milwaukee.

Highway construction firms winning awards were Burrell Construction & Supply Co. of New Kensington, Pa., first prize; O'Neil Construction Co. of Havre, Mont., second prize; and A. J. Baltes of Norwalk, Ohio, and Colglazier & Hoff of San Antonio, Tex., tied for third prize.

The best five-year records among heavy construction firms were set by Herbert F. Darling of Williamsville, N. Y.; Henry L. Horn of Caldwell, Idaho; and E. C. Machin of Allentown, Pa., in that order.

74 No Lost-Time Accidents

Another record was seen in the number of firms reporting no lost-time accidents—74 this year compared to 44 in the previous contest.

Among the 38 building contractors recognized at this year's convention for such achievement were 15 Texas firms. They were Hickey & Co., J. Lawrence Jones, J. L. O'Rourke & Son, W. H. Wallace Construction Co., Bock Construction Co., Thomas P. Brennan, Inc., and Peterson Construction Co. (all of Dallas); the J. C. Plank Co., W. E. Woodruff Co., Thrash Construction Co., Howard Construction Co., I. G. Audish, Rob-

ACCIDENT PREVENTION

ert E. Nesmith, Inc., and Brown Construction Co. (all of Houston); and Moore & Moore of LaPorte, Texas.

Eight Pennsylvania builders of such merit were the Nanticoke Construction Co. of Nanticoke, F. J. Cuppels of Kingston, H. A. Williams, Inc., of Allentown, Berretta Construction Co. of Exeter, Ortman & Reitze of Meadville, Guy J. Hafer of Chambersburg, J. C. Orr & Son of Altoona and S. G. Mastriani Co. of Scranton.

The other building construction companies were Leto Construction Co. of Detroit; Kucharo Construction Co. of Des Moines, Ia.; Dowling Construction Co. of Williamstown, W. Va.; W. J. Elliott of McConnellsville, Ohio; Quinn & Conant of Los Angeles; Central Engineering Co. of Davenport, Iowa; Stibbard Construction Co. of Detroit; John C. Westphal Co. of Detroit; E. L. Harris & Son of Charleston, W. Va.; Viggo M. Jensen Co. of Albert Lea, Minn.; Gene Hurley Construction Co. of St. Paul, Minn.; Kenhill Construction Co. of Charleston, W. Va.; and three Milwaukee firms — Bauer-Shoenek Construction Co., Inc., Robert L. Reisinger & Co. and Stack Construction Co.

No Lost-Time Highway Firms

Highway construction firms with no lost-time accidents were all of five states—Michigan, Pennsylvania, Iowa, Ohio and Montana.

The Michigan road contractors honored were Drainage Contractors, Inc., of Dearborn, McNally Construction Co. of Saginaw, General Paving Construction Co. of Grand Rapids, John K. Jackson of Ironwood, Crossman-McCoy of Sodus, Carothers & Dahlstrom of Fremont, Paul C. Miller of Comstock Park, A. Lindberg & Sons, Inc., of Ishpeming and Harry Pickett of Allegan.

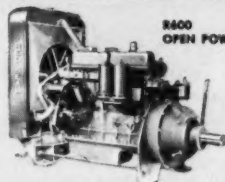
Eight Iowa highway contractors were Dale Upham of West Union, J. T. Ryan of Oelwein, Kehe Construction Co. of Waverly, Diesch Constructors of Waterloo, Eben Van Dusseldorp of Colfax, Mott Construction Co. of Centerville, Gillotti Construction Co. of Des Moines, and Dixon Bros. Co. of Correctionville.

Completing the roster of highway contractors without lost-time accidents were J. C. Orr & Son of Altoona, Pa.; Joseph H. Goss of Newark, Ohio; O'Neil Construction Co. of Havre, Mont.; S. E. Johnson Co. of Maumee, Ohio; M. O'Herron Co.

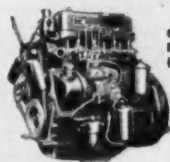
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Model	Cyl.	Bore	Stroke	Displ.	Bare Engine H.P.
N55	4	2 1/4	3 1/2	56	13 @ 2000 RPM
N62	4	2 1/2	3 1/2	62	16 @ 2200 RPM
Y69	4	2 1/2	3 1/2	69	21.4 @ 2400 RPM
Y112	4	2 3/4	3 1/2	91	28.5 @ 2400 RPM
F124	4	3	3 1/2	112	32 @ 2400 RPM
F140	4	3 1/4	4 1/2	140	36 @ 2400 RPM
F162	4	3 3/4	4 1/2	162	42 @ 2400 RPM
F186	6	3	4 1/2	186	60 @ 2400 RPM
F209	6	3 1/4	4 1/2	209	68 @ 2400 RPM
F226	6	3 3/4	4 1/2	226	73 @ 2400 RPM
M271	6	3 3/4	4 1/2	271	86 @ 2400 RPM
M290	6	3 3/4	4 1/2	290	92 @ 2400 RPM
M330	6	4	4 1/2	330	104 @ 2400 RPM
B427	6	4 1/4	4 1/2	371	106 @ 2200 RPM
B434	6	4 1/4	4 1/2	427	122 @ 2200 RPM
G157	4	3 1/2	4 1/2	134	32.2 @ 2000 RPM
H227	4	3 1/2	4 1/2	157	37.7 @ 2000 RPM
H243	4	3 3/4	5 1/2	227	54 @ 2000 RPM
H260	4	3 3/4	5 1/2	243	58 @ 2000 RPM
T371	6	4 1/4	5 1/2	260	60.2 @ 1800 RPM
T427	6	4 1/4	5 1/2	371	119 @ 2400 RPM
U501	6	4 1/2	5 1/2	427	140 @ 2400 RPM
R513	6	4 1/2	5 1/2	501	160 @ 2400 RPM
R572	6	4 1/2	5 1/2	513	164 @ 2400 RPM
R602	6	4 1/2	5 1/2	572	182 @ 2400 RPM
S749	6	4 1/2	5 1/2	602	192 @ 2400 RPM
				749	188.5 @ 1800 RPM

INDUSTRIAL DIESEL ENGINES

Model	Cyl.	Bore	Stroke	Displ.	Bare Engine H.P.
GD157	4	3 1/4	4 1/2	157	37.5 @ 2000 RPM
HD243	4	3 3/4	5 1/2	243	53.1 @ 2000 RPM
TD427	6	4 1/2	5 1/2	427	102 @ 2000 RPM
RD572	6	4 1/2	5 1/2	572	137 @ 2000 RPM

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ACCIDENT PREVENTION

Contractor Finds Profit in Job Safety

• H. J. Massman Describes His Accident Prevention Program

» A CONTRACTOR with a poor accident record may find his competitive position is similarly poor. This was the experience of H. J. Massman, president of the Massman Construc-

tion Co., Kansas City, before he "got wise."

In an address given to the A.G.C. of Missouri, Mr. Massman described the development of a safety program which minimized his firm's accidents and upped its profits.

The problem, said Mr. Massman, "was to get the field men interested in accident prevention and to find out, if possible, the cause of our bad accident experience."

The causes were a lack of both interest and education in construction safety, Mr. Massman asserted.

The remedy—"We saw to it that the men knew, or were told, the proper way to do their jobs. We were careful to provide a safe place for them to work. On various occasions we used special safety devices."

"We tried to make it easy for the men to do their work properly and then demanded that the work be done properly. The result was astounding. Not only did we reduce the number and cost of personal accidents, but we reduced the unit cost of doing work. Instead of being a matter of expense, safety work made us money."

"The contractor must remember that a workman cannot do his work right unless he has a suitable, safe place to work. The best safety device we have been able to find is a safe place to work. If a man has to hang on with one hand, he doesn't do much work with the other. If he doesn't have to worry about his safety, he can do better work and more work."

Supervisors Must Be Experts

To follow through on job safety, the supervisory personnel must be experts in their work, Mr. Massman advised. "They must know how the work should be done, what a man can or cannot do, and which methods to use."

Also, contractors must obtain the cooperation of the union, he said. ". . . labor agreements (should) always include the right to discharge a man for not obeying the directions of his foreman or for not following the safety rules."

Though safety has its very important humanitarian aspects, Mr. Massman said, it has another significant feature for most businessmen. Safety

Indirect Cost of Accidents

The accident: Because workmen were careless in placing protective steel mats during a blasting operation, flying stone injured a worker 300 feet away lacerating his face and injuring his eye.

Direct cost: \$1,250 for compensation and medical aid.

Proximate results: The rock sprayed a truck repair shop, rupturing the fittings of a gasoline storage tank. The shop burned to the ground, the fire damaging three pieces of heavy equipment and also destroying lumber in an adjoining storage area.

Indirect cost: \$28,000 out of the contractor's pocket.

Prevention: Keep employees aware of the need for safe practices on the job. In this case, the workmen had been informed of the proper way to place the mats but had not heeded instructions, thinking them trivial and relating wholly to personnel safety.

Awards (Continued)

of Pittsburgh, Pa.; and Koski Construction Co. of Ashtabula, Ohio.

Thirteen contractors engaged in heavy construction were cited for operating throughout 1951 with no lost-time accidents. They were Fry & Kain of Lansing, Mich.; J. C. Orr & Son of Altoona, Pa.; Jas. H. McQuade & Sons Co. and Freeland Construction Co., both of Pittsburgh, Pa.; Kehe Construction Co. of Waverly, Ia.; Elmer Vogt, Inc., of Massillon, Ohio; Geo. Carlson Co. of Milwaukee, Wis.; Reason Construction Co. of Pittsburgh, Pa.; Ankrom & Castin of Parkersburg, W. Va.; Drainage Contrs., Inc. of Dearborn, Mich.; Robertson-Henry Co. of Huntington, W. Va.; Gerald Mora of Houston, Tex.; and C. F. Replogle of Circleville, Ohio.

ACCIDENT PREVENTION

means efficiency—more production per man—more profit.

These principles cannot be adhered to if accidents are allowed to occur without heed for prevention, he declared. "When a serious accident occurs, work is interrupted, time is lost, often material and equipment are damaged—just the things the businessman striving for efficiency does not want to happen."

Mr. Massman claimed that contractors were too often unrealistic and unbusinesslike in their opinion of the worthiness of accident prevention.

"Contractors are apt to consider safety in the same class as Boy Scout work. They think of preventing workmen from getting hurt as a humanitarian activity, entirely separate from the construction business, classifying it as a form of charity or altruism. They are often unaware of their losses or are reluctant to admit them. It is not uncommon for an employer to feel that the insurance premium paid for workmen's compensation insurance takes care of his risks for him, forgetting that the premiums pay the claims, and forgetting also the hidden or indirect losses which his premium does not pay."

Safety a "Modest" Investment

He warned that safety is a "modest" business investment. Not only does indifference to safety mean a loss of dollars that go unnoticed in the office accounts, but it also means "pain and heartache" to the men injured. Accidents injure the morale and efficiency of the workers, creating hidden cuts in profits.

Regarding safety engineers, Mr. Massman maintained that a competent safety adviser is invaluable. However, to be competent he must not only be fully familiar with the rules of construction safety, but he must also be well-informed on practical job engineering and able to apply his knowledge in a simple, common-sense manner. On the other hand, he said, an impractical adviser can do more harm than good.

In conclusion, Mr. Massman most emphatically warned contractors that governmental regulations will become a reality if the industry itself does not improve its accident record.

Fourteen pocket-sized booklets covering all phases of construction safety have just been issued by The Associated General Contractors of America. Ideal for foremen on the job.

Q: Who needs this man?



A: Everyone in your organization — especially YOU!

Meet the Employers Mutuals Safety Engineer. He's at your service to protect you, and those who work with you, by preventing accidents and reducing accident-disease hazards through practical safety engineering methods. His fine "Performance in Action" helps save manpower, materials and machines from loss or damage.

Results? Employers who place their workmen's compensation insurance with Employers Mutuals provide their employees with the morale-building advantage of a safer place to work. Further, every employer knows that the fewer the accidents, the lower the premium rates. Thousands of our policyholders, cooperating with their Employers Mutuals Safety Engineer, have earned lower rates—and saved untold sums on the "hidden costs" of accidents, which often are more than four times the cost of claims!



The Employers Mutuals Team

You don't pay an extra cent of premium for the services of this competent, practical safety engineer, or of any member of your Employers Mutuals "team" of specialists—industrial nurse, sales representative, underwriter, claim man and others.

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Employers Mutuals writes: Workmen's Compensation—Public Liability—Automobile—Group Health and Accident—Burglary—Plate Glass—Fidelity Bonds—and other casualty insurance. Fire—Extended Coverage—Inland Marine—and allied lines. All policies are nonassessable.

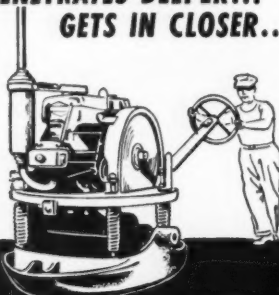
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In just two passes the Vibro-Plus Soil Compactor achieves more complete compaction than a 12-ton roller can in six. Under its own power it compacts up to 2000 sq. ft. per hour; towed by tractor, it accomplishes up to 8000 sq. ft. per hour.

Depth of penetration reaches up to 40 inches. And there are almost no limitations on its maneuverability; it gets in close to footings, piles, etc. Write for descriptive bulletins, names of very pleased users, and nearest distributor.

● The Vibro-Plus type MRJ-6 Terrapac, powered by a 10 HP diesel engine, is operated by one man. Its 65" x 45 1/2" base is steered easily. It moves forward or backward. Rubber-tired wheels attach for transportation.



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CHAPTERS • BRANCHES

Highway Needs Stressed at Kansas Meet

● Maxwell Re-elected by Kansas Contractors Association

More than 600 persons came to Kansas City for the annual meeting of the Kansas Contractors Association, A.G.C., representing 102 firms of the chapter's membership.

C. E. Maxwell, Maxwell Bridge Co., Columbus, was re-elected president for 1952 as were all other 1951 officers of the chapter. Vice president is Russell Ralph, Kaw Paving Co., Topeka, and treasurer is C. L. Burt, Burt & Binford, Hutchinson.

Governor Edward F. Arn of Kansas, declaring that present highway needs of the state had never been more ur-

gent, warned the group that already funds and materials were needed to care for highway work that has been scheduled as far in advance as 1970.

H. E. Robinson, district manager, Kansas River District, Bureau of Reclamation, McCook, Nebr., outlined programs under construction and being planned in Kansas, stating that a large amount of work is forthcoming.

Glen W. Maxon, Dayton, national A.G.C. president, warned that federal intervention was a certainty unless the construction industry improved its safety record.



Kansas Construction Magazine

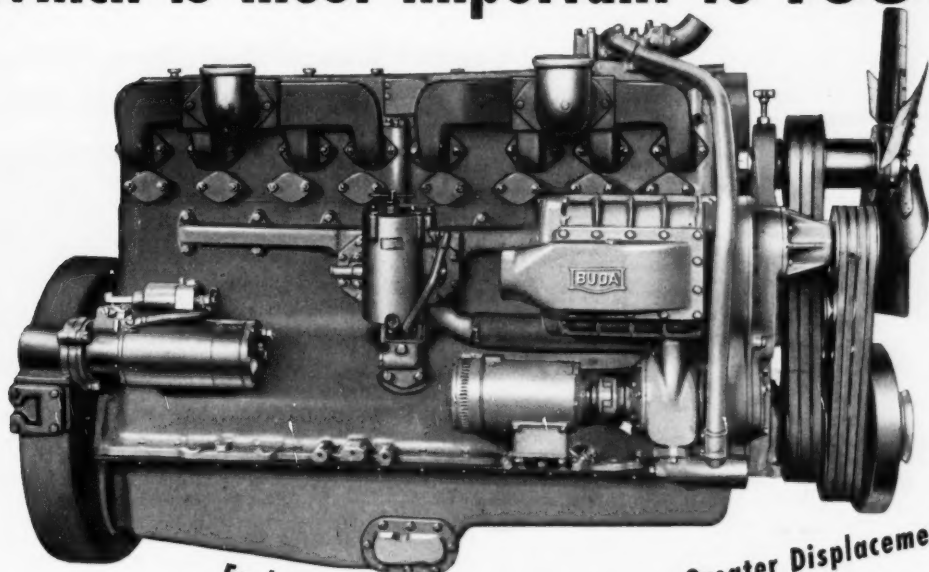
Left to right, Arch N. Carter, manager of the national A.G.C.'s Highway Division, Washington; 1952 Chapter President Maxwell; Engineer-Secretary Ballard and national A.G.C. President Maxon.

Below—Seated: Treasurer C. L. Burt; A.G.C. Past President M. W. Watson, Topeka, director; Chapter President Maxwell; and E. C. Stewart, Globe Construction Co., Wichita, director. Standing: F. H. Freeto, Freeto Construction Co., Pittsburg, director; Vice President Ralph; J. W. Frisbie, Kansas City, Kan., director; and Engineer-Secretary J. W. Ballard.



Kansas Construction Magazine

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gives you more for your power dollar—more positive advantages that add
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nearby Buda Engine Distributor. Write for Bulletin 1526 and com-
plete details. *The Buda Company, Harvey, Illinois.*

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**a Power-Full and Dependable Engine
FOR EVERY NEED**



In his discussion of Washington affairs, he stated that only 40% of the steel needed for highway construction this year would be made available and only 16% of this controlled material needed for commercial construction would be obtainable. He asserted that, like every other industry, the construction industry must carry on a persistent "fight for its share of scarce materials."

Colonel L. J. Lincoln, Kansas City District Engineer for the Corps of Engineers, estimated that about \$48 million in defense projects would be constructed during the year but anticipated a substantial curtailment of the \$700 million in reclamation projects planned for the Kansas Basin.

He asserted that engineers preferred and would use the contract construction method whenever possible.

Gale Moss, director of highways for Kansas, objected to government planners' tabbing highway construction as "deferrable public works" and pledged the state's support in keeping the highway program rolling as well as possible.

Flood Control Branch Elects New Officers

• G. W. James Heads Mississippi Valley Group in 1952

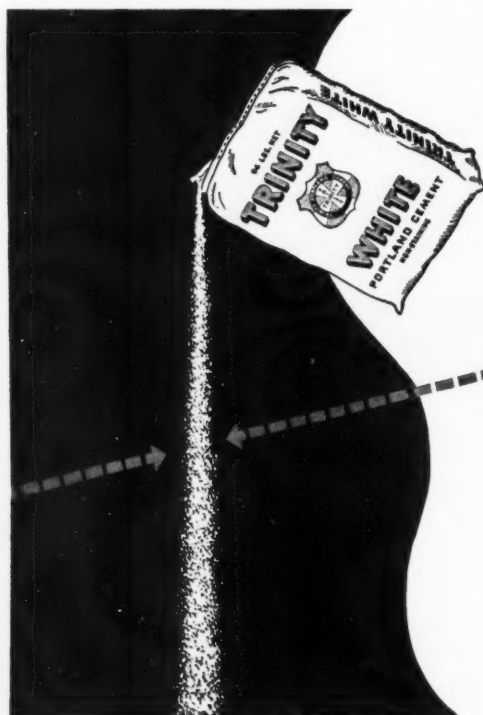


The Mississippi Valley Flood Control Branch installed new officers during its recent annual meeting in Memphis.

Above, from the left, are A. Guibet, McWilliams Dredging Co., New Orleans, who was president of the branch from 1938 to 1949; Alvin G. Hall, formerly president, Pioneer Contracting Co., Memphis, now an equipment dealer of El Paso, Tex., retiring president; G. W. James, T. L. James & Co.,

Inc., Ruston, La., 1952 president; C. W. Vollmer, C. W. Vollmer & Co., Inc., Houston, vice president; and J. Warfield Rodgers, H. N. Rodgers & Sons Co., Memphis, vice president-at-large.

Speakers included Brig. Gen. P. A. Feringa, president of the Mississippi River Commission, and Burt L. Knowles, engineer adviser, national A.G.C. staff, Washington, D. C.



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as white



as snow

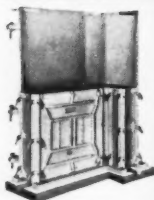
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THE FACILITIES of National Surety have been used by the construction industry for many years. As a result of this close association, we know well the skill, ability and accomplishments of the nation's construction men who are mobilizing again for an all-out speed-up of industrial expansion and emergency defense building. Our country can have confidence that they will prove equal to this huge task.

National Surety stands ready to assist in this great effort, by performing fast, efficient Contract Bond Service through its qualified agents and representatives.



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CHAPTERS AND BRANCHES

Larsen Elected Head of San Diego Chapter



» **PRINCIPAL** business at the annual meeting of the San Diego Chapter, A.G.C., was the election and installation of officers and directors for 1952.

New president of the chapter is C. A. Larsen, a building contractor. He succeeds Walter H. Barber. Robert M. Golden was elected vice president. He is vice president of M. H. Golden Construction Co. and son of Morley H. Golden, president of the chapter in 1937 and again in 1943. The chapter's manager is M. A. Mathias.

Additional directors elected are Mr. Barber; Earl E. Harris, Sim J. Harris Co.; George L. Cory, Cory & Long-

worth; and Preston Sherrard, W. P. Fuller & Co.

Mr. Barber predicted that the 1952 construction volume nationally and in the San Diego area would be substantially below the record levels of 1951. He also maintained that there would be no substantial relief from materials shortages until 1953.

Manager Mathias pointed to instances where the chapter's efforts had resulted in use of the contract method instead of proposed day labor.

Seated left to right in the picture above are Vice President Golden, President Larsen, retiring President Barber; standing are Directors Harris, Cory and Sherrard.

Smith Succeeds Griffith

During the annual banquet and stag held by the Southern California Chapter, A.G.C., and attended by more than 850 members and guests, new officers and directors were installed.

R. J. Smith of the P. J. Walker Co., Los Angeles, became president succeeding Ben P. Griffith, Griffith Co., of the same city. Vice presidents are Harry L. James, Guy F. Atkinson Co.; C. L. Parkhill, Parkhill-Wade; and Spencer Webb, Webb & White. Treasurer is Donald E. Reed, Stanton Reed Co., and manager is W. D. Shaw.

Directors for the year are: Highway—Mr. Griffith, John J. Swigart, James L. Ferry, Herb Hershman; Building—R. A. Smith, Mr. Reed, Paul Spencer, Ray A. Myers, J. V. Quinn; Engineering—Spencer Webb,



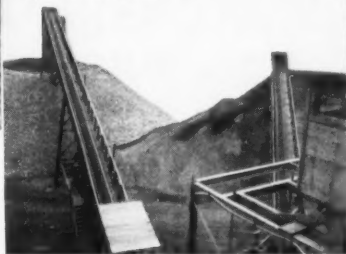
Pres. Smith, right, and Mr. Griffith

Harry L. James, B. P. Willis, Merrill Dixon; Miscellaneous—Utilities—C. L. Parkhill, Donald E. Kelbey, William Irish; Affiliate—Kenneth W. Kendrick.

What's U. S. Rubber doing at Pine Flat Dam?



View of U. S. Rubber belts ascending the mountain side for approximately three quarters of a mile.



Stockpiling coarse and fine material taken from the gravel pit.

At this great California installation, the finished aggregates and sand are carried by "U.S." conveyor belts from storage all the way to the batching plant high up on the site. The belting is 36" wide, climbs six flights for a total distance of 3700 feet. This 100% "U.S." belt installation is another example of 3-Way Engineering — "U.S." engineers worked with the conveyor equipment manufacturer and the contractor to produce this economical and efficient haulage system.

United States Rubber Company engineers have designed and built conveyor belts for a variety of installations, large and small. Let them advise you on any materials handling problems. Write to address below.



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Harrison Heads South Florida Chapter

» THE SOUTH Florida Chapter installed new officers during its 29th annual meeting held recently and attended by 193 members and guests.

M. R. Harrison, Jr., M. R. Harrison Construction Corp., was elected president for 1952 succeeding Frank

J. Rooney, Frank J. Rooney, Inc., who was president in 1950 and 1951. M. R. Harrison, Sr., was president in 1930 and 1931.

James M. Albert, Albert Construction Co., is vice president and George Preston, Deigaard & Preston Builders,

Inc., is secretary-treasurer. Paul Hinds continues as executive manager of the chapter composed of building contractors in the Miami area.

Labor Committee Visitors

James D. Marshall, assistant managing director of the national A.G.C., Washington, D. C., addressed the group. A.G.C. members who were guests included Lester Rogers, Chicago, chairman of the national association's Labor Committee; Arthur Wells, also of Chicago; Roy Pickett, Detroit; J. R. Mitchell, Pittsburgh; James L. Ewell, Lakeland, past president of the Florida A.G.C. Council, and Vincent Gorham, West Palm Beach, past president of the Florida East Coast Chapter and president of the Council.

Directors are Scott H. Braznell, Jr., S & B Construction Co.; Edward M. Fleming, Edward M. Fleming Construction Co.; Joseph J. Orr, John B. Orr, Inc.; Lyle Roberts, Lyle Roberts, Inc.; C. Frank Wheeler, C. F. Wheeler, Builder, and Past President Frank J. Rooney.



Left to right are V. R. Gorham, president of the Florida State A.G.C. Council; South Florida Chapter Past President Frank J. Rooney; James D. Marshall, national A.G.C. assistant managing director; 1952 South Florida Chapter President M. R. Harrison, Jr., and J. L. Ewell, a national A.G.C. director and past president of the Florida West Coast Chapter.



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TO FIT THE
MACHINE

POWER
TO FIT THE
JOB

With blade tilted and angled for ditching, this "Bull Moose" track tractor, built by Canadian Mobile Co., North Vancouver, B. C., is all set for a rugged workout. A V-type 4-cylinder Wisconsin Heavy-Duty AIR-COOLED Engine delivers plenty of power for "what it takes" to handle the job in any weather, under just about any working conditions.

Note the compact installation of the power unit. V-type engine design permits a short crankshaft and minimum overall height. Crankshaft rides on Timken tapered roller bearings at both ends to take up radial and end thrusts, providing fullest protection against bearing failures — typical of Wisconsin heavy-duty design throughout on all models . . . single cylinder, 2-cylinder and V-type 4-cylinder, 3 to 30 hp.

Specify "Wisconsin Power" for YOUR equipment.

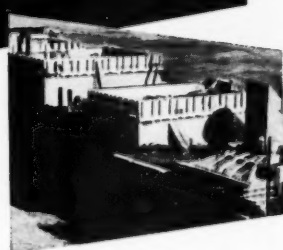


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2.	Accident Prevention Manual (Revised and enlarged 1949)	3.00	30.00	\$210.00
CONTRACTS				
3.	Standard Contract for Engineering Construction issued by the Joint Conference on Standard Construction Contracts	.25	2.75	20.00
4.	Standard Building Contract of the American Institute of Architects—Revised 6th Edition	.50	—	47.50
5.	Subcontract form—American Institute of Architects—Revised 5th Edition	.10	—	9.50
7.	Standard Government Contract	.10	.50	4.00
8.	A.G.C. Cost Plus a Fee Contract	.10	.50	2.50
9.	A.I.A. Cost Plus a Fee Agreement between Contractor and Owner—Revised 6th Edition	.10	—	—
11.	Equipment Rental Agreement	.10	.50	3.00
12.	A.G.C. Proposal Form	.10	.50	3.00

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13.	A.I.A. Accounting Form #701 "Change Order"	.20	1.80	12.00
14.	A.I.A. Accounting Form #702 "Request for Partial Payment"	.20	1.80	12.00
15.	A.I.A. Accounting Form #703 "Certificate for Payment"	.20	1.80	12.00
16.	Building Estimate Summary	.10	.50	3.00
17.	Job Overhead Summary	.10	.50	3.00
20.	Contractors' Equipment Ownership Expense (Itemized tables of ownership expense elements with instructions for application. Revised 1940)	1.00	10.00	65.00
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28.	Financial Statement and Questionnaire for Credit Transactions	.20	1.80	12.00

MISCELLANEOUS

29.	Insurance Check List	.10	1.00	5.00
30.	The Functions of a General Contractor	.10	.75	6.00
34.	A.G.C. Governing Provisions	.10	.50	3.00
35.	A.G.C. Code of Ethical Conduct	.10	.50	3.00
36.	Concrete Mixer Standards	—	—	—
36a.	Contractors' Pump Standards	—	—	—
37.	A.I.A. Standard Form of Arbitration Procedure	—	—	—
38.	Suggested Guide to Bidding Procedure	—	—	—



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43. A.G.C. SOCIAL SECURITY FORMS

Form SS1: Application for Employment; Form SS2: Employees' History Record; Form SS3: Employees' Employment and Earnings; Form SS4: Payroll. List of prices and styles will be furnished to A.G.C. members on request.

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Mar. 1952

Safety Emphasized at Missouri Meeting

» CONTRACTORS attending the 26th annual convention of the A.G.C. of Missouri heard addresses on accident prevention, highway construction problems and work on flood control projects in the Missouri area.

During the two-day meeting in St. Louis, the following officers were elected: President, Frank E. Rolfe, Harrison Engineering & Construction Corp., Kansas City; vice president, R. M. Hoover, Kansas City Bridge

Co., Kansas City; treasurer, J. M. Joyce, Cameron, Joyce & Co., Keokuk, Iowa; assistant treasurer, M. E. DeWitt, Porter-DeWitt Construction Co., Poplar Bluff, Mo.; and secretary, E. C. L. Wagner, Jefferson City, Mo.

The application of general principles of construction safety to the functions and policies of a contracting



Head table at the 26th Annual Banquet of the A.G.C. of Missouri. Seated from the left are: William R. Brown, research director, Missouri State Chamber of Commerce, Jefferson City, Mo.; Frank J. Lahey, member, Industrial Commission of Missouri, Jefferson City; H. J. Massman of Massman Construction Co., Kansas City; Colonel E. A. Brown, executive officer, Missouri River Division, Corps of Engineers, Omaha, Neb.; Rex M. Whitton, chief engineer, Missouri State Highway Department, Jefferson City; F. E. Rolfe, secretary-treasurer, Bushman Construction Co., St. Joseph, Mo., newly elected president of the chapter; Joseph F. Holland, counsel, Pevely Dairy Co., St. Louis; Ray Gast of Gast & Ray Contracting Co., Louisiana, Mo.; Arch N. Carter, manager, Highway Division, A.G.C., Washington, D. C.; R. M. Hoover, Kansas City Bridge Co., Kansas City; and E. A. Wood, training supervisor, Division of Employment Security, Jefferson City.

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THE INDUSTRY'S MOST VERSATILE

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Optional Equipment: Gin Pole Assembly, "Chicago" Boom, Tip-Over Bucket, Truck Mounting, Interchangeable 10' Extensions.

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firm were described at length by H. J. Massman, Massman Construction Co., Kansas City, in an address entitled "Why I Practice Accident Prevention" (see page 74).

The increasing interest of business in accident prevention as an economy measure and as a humanitarian effort was commented upon by Frank J. Lahey, a member of the Industrial Commission of Missouri.

As evidence that business has become increasingly safety-minded, Mr. Lahey stated that, in spite of record increases in payrolls, premiums for workmen's compensation insurance had decreased 43% from 1927 to 1948. This speaks well for the employer, he said, as premiums are based on a firm's accident record.

As examples of inroads made on occupational hazards, he pointed to the virtual elimination of silicosis in the last 20 years and the improved methods of sand-bogging.

Employers are now getting full support of the labor unions in their safety efforts, he stated. Where the unions once protected the careless worker, they now help the employer enforce safety rules. Because of this factor, "horseplay" cases are now relatively rare, he asserted.

In conclusion he maintained that contractors are realizing that accident prevention pays off in profits. In-

CHAPTERS • BRANCHES

juries which slow down the job are greatly reduced and insurance premiums are cut down.

Highway construction in Missouri will total about \$33 million in 1952, according to Rex M. Whitton, chief engineer of the state's Highway Department, who addressed the meeting.

Mr. Whitton assured contractors that the contract method of construction was the preferred method and that all but smaller maintenance projects would be advertised.

Missouri Basin Topic

Pointing to the need for the control of rivers in the Missouri area, Col. E. A. Brown, executive officer of the Missouri Division, Corps of Engineers, said, "Damage to farms, homes, growing crops, industries and urban areas totalled \$870 million in July alone. . . . Over 90,000 persons were driven from their homes, 25,100 homes were flooded, and more than 2,500 were destroyed."

He stated that the 1951 flood proved that "prior flood planning was sound" but that many new projects were needed.

National A.G.C. President G. W. Maxon, Dayton, Ohio, spoke on the place of the association in the construction industry.

Board of Directors

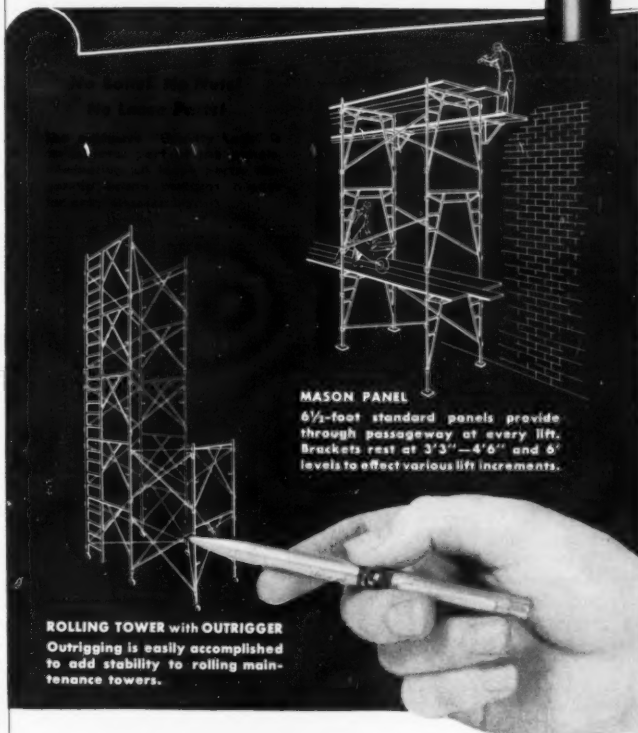
The board of directors is composed of the following: F. E. Dawkins, Land Construction Co., St. Louis; H. W. Masters of Masters-Jackson Paving Co., Springfield; E. A. Dolan, Payne & Dolan, Inc., Chicago; Dale Maxwell of Maxwell Bridge Co., Columbus (Kan.); J. R. Bushman, Bushman Construction Co., St. Joseph; O. W. Knutson of Knutson-Gould Construction Co., Kansas City; R. R. Riney, O'Dell & Riney Construction Co., Kirkwood; E. W. Menefee of W. J. Menefee Construction Co., Sedalia; Morris E. DeWitt, Porter-DeWitt Construction Co., Poplar Bluff; G. J. Stoelting, Davis Construction Co., Boonville; L. W. Riney of L. W. Riney Construction Co., Hannibal; Frank Trager, Chillicothe; H. J. Massman, Jr., of Massman Construction Co., Kansas City; J. S. Maitland, Kansas City Bridge Co., Kansas City; G. H. Hamilton of Gordon Hamilton Contracting Co., Inc., Kansas City; D. J. Kane, Cameron, Joyce & Co., Keokuk, (Iowa); R. B. Koss of Koss Construction Co., Des Moines, (Iowa); and R. E. Rolfe, Harrison Engineering & Construction Corp., Kansas City.

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MASON PANEL

6 1/2-foot standard panels provide through passageway at every lift. Brackets rest at 3'3", 4'6" and 6' levels to effect various lift increments.

ROLLING TOWER with OUTRIGGER

Outrigging is easily accomplished to add stability to rolling maintenance towers.

- Completely automatic locking mechanism. Requires only one man to assemble.
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- Swivel action permits "racking down", scaffolding circular objects, offers exceptional flexibility.
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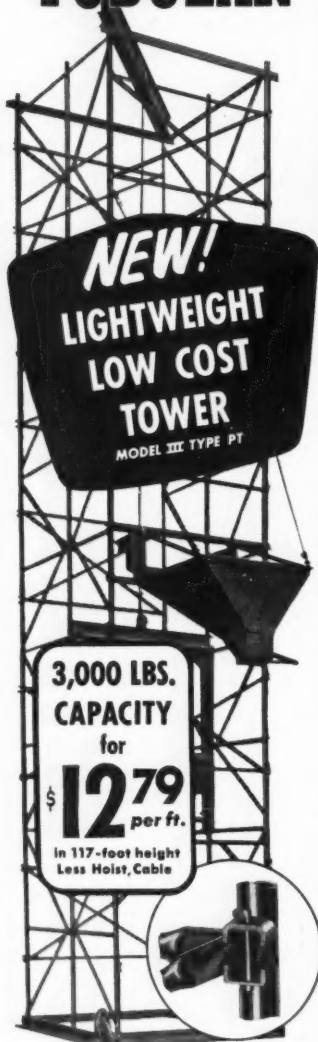
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CHAPTERS • BRANCHES

South Dakota Chapter Elects Beckman



In the picture on the left are (from the left) W. H. Emerson, vice president of the South Dakota Society of Engineers & Architects; Burt L. Knowles, A.G.C. engineer adviser; and P. A. Bradbury, retiring president of the Highway Construction Industry of South Dakota; and on the right are W. S. Hannan, secretary of the chapter; J. H. Beckman, president; and C. D. Bartholow, vice president.



» THE HIGHWAY Construction Industry of South Dakota, Inc., A.G.C., held its annual meeting jointly with the South Dakota Society of Engineers and Architects, and the Associated Contractors of South Dakota.

1952 officers of the A.G.C. highway chapter are: President, J. H. Beckman, Sioux Falls; vice president, C. D. Bartholow, Huron; and secretary-treasurer, John L. Materi. Permanent secretary of the chapter is W. S. Hannan, Pierre.

Directors include the above officers and G. E. Bergren, Sioux Falls; P. A. Bradbury, Aberdeen; H. F. Emme, Rapid City; J. A. Healy, Sioux Falls; and M. B. Staven, Pierre.

Stressing accident prevention education, Leo Orchard, district engineer of the Employers Mutuals of

Wausau, Omaha, Nebr., asserted that if foremen would give brief instructions once a week, the men on the job would be kept aware of the safe practices to which they must adhere. The result—fewer accidents.

In connection with his talk Mr. Orchard ran films taken by Robert Hyde of Peter Kiewit & Sons Co., A.G.C., and himself which portrayed the causes of some serious construction accidents.

Stressing the importance of the construction industry, B. L. Knowles, engineer-adviser of the national A.G.C., Washington, D. C., said that in 1951, one dollar in every eight created in end products and services in this country was a construction dollar. The construction industry employed an average of more than 2.5 million workers last year.

D. R. Agnew New President of W. Va. Group

» DURING the two-day annual meeting of the A.G.C. of West Virginia, D. R. Agnew, Agnew Construc-

tion Co., Inc., a highway and heavy construction firm of Ronceverte, W. Va., was installed as president,



New officers of the A.G.C. of West Virginia are, left to right, Robert Y. Hayne, Charleston, chairman of the Highway and Heavy Division; James M. Jarvis, Clarksburg, chairman of the Building Division; D. R. Agnew, president; and L. C. Basham, chairman of the Associate Division.

succeeding Walter Seabright, Seabright Construction Co., Wheeling, who became a member of the board of directors.

Other 1952 officers are Vice Presidents Paul Anderson and J. D. Higginbotham of Charleston, C. H. Jimson of Huntington, Leo Vacello of Beckley, and James E. Coombs of Morgantown; C. J. Kuhn, Charleston, secretary; W. E. Abbitt, Charleston, treasurer; James M. Jarvis, Clarksburg, chairman of the Building Division; Robert Y. Hayne, Charleston, chairman of the Highway and Heavy Division; and L. C. Basham, Charleston, chairman of the Associate Division. Executive secretary of the chapter is Eugene H. Brown.

Speakers included G. W. Maxon, national A.G.C. president, Dayton; C. P. Street, national A.G.C. vice president-elect, Charlotte, N. C.; A.G.C. Managing Director H. E. Foreman, Washington, D. C.; Robert E. Withey, president of the West Virginia State Board of Certified Public Accountants, Charleston; and James D. Marshall, assistant managing director of the A.G.C., Washington, D. C.

Obituary

A. L. Forbes, Jr., 53, an executive of Associated Pipe Line Contractors, Inc., Houston, died of a heart attack on January 10. He had been elected president of the Pipe Line Contractors Association, A.G.C., on Jan. 9.



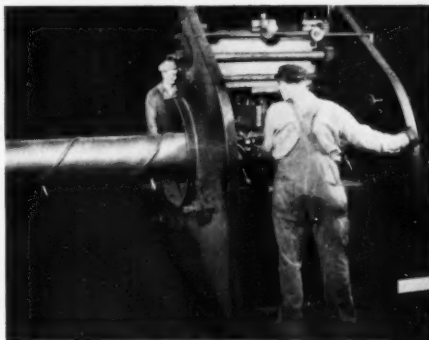
He was born in Galveston, Tex., and graduated from Texas A. & M. with a degree in civil engineering in 1921. He spent his entire life in the natural gas and pipe line industry, gaining a wide reputation as an engineer and designer in that field.

At the time of his death, he was en route by plane from Houston to Bangor, Me.

He is survived by his widow, Corinne Mayfield Forbes, a son, A. L. Forbes, III, and a daughter, Patricia. He was a member of the Houston Club, the Houston Country Club, and Temple Lodge No. 4.

How NAYLOR Light-weight Pipe is built to take it

Here is the picture story of how Naylor creates a light-weight pipe for heavy-duty service.

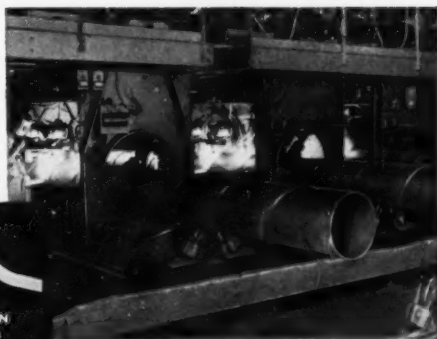


In this operation, the Naylor pipe machine forms sheet into a spiral, lock-seamed pipe. This process creates a structure that is pipe before it is welded. As shown in the sketch of a lateral section before welding, the lockseam carries the structural load.



LATERAL SECTION
BEFORE WELDING

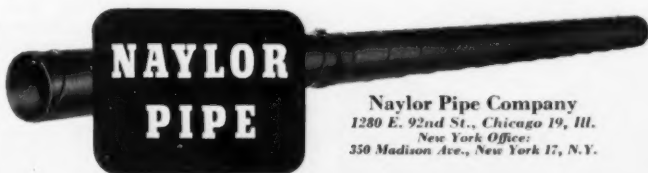
Illustrated here is the Naylor automatic welding process which welds the lock-seamed spiral to the wall of the pipe. This step provides a positive seal as shown in the lateral-section sketch after welding.



LATERAL SECTION
AFTER WELDING

Because the lockseam carries the load and the weld is relieved of any strain, Naylor pipe provides the practical answer for lines that must stand up in rugged service in the construction field.

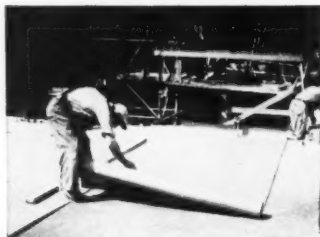
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IT'S A "NATURAL" FOR YOU on single-story and multi-story jobs... also for curing and protecting driveways, sidewalks, foundations, roads and other concrete slab work or masonry.

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CHAPTERS • BRANCHES

Scott, Beckenhauer Head Neb. Chapters

The annual meetings of the Nebraska Building Chapter and the Nebraska Chapter were held jointly and attended by more than 300 contractors and guests.

Speakers included Welton A. Snow, manager of the national A.G.C.'s Building Contractors' Division, and Arch N. Carter, manager of the Highway Contractors' Division, both of Washington, D. C.; Colonel Henry J. Hoeffler, district engineer, Corps of Engineers, Omaha; A. S. Horner, national A.G.C. president-elect, Denver; and Harold W. Richardson, editor of *Construction Methods & Equipment*, New York.

Officers of the Nebraska Building Chapter are O. C. Beckenhauer, Beckenhauer Bros., Norfolk, president; John H. Miller, Olson Construc-

tion Co., Lincoln, vice president; and T. J. Kalamaja, Peter Kiewit Sons' Co., Omaha, treasurer.

These men plus Paul Borchman, A. Borchman Sons, Omaha, and H. C. Fricke, Fricke Construction Co., Alliance, compose the board of directors. Virgil J. Haggart is secretary.

Officers of the Nebraska Chapter are Wardner Scott, W. A. Lynn Construction Co., Lincoln, president; H. R. Anderson, Overland Sand & Gravel Co., Stomberg, 1st vice president; L. D. Horrocks, Inland Construction Co., Omaha, 2nd vice president; L. R. Harpstreith, Francis R. Orshek Co., Fremont, 3rd vice president; and P. J. Meehan, Abel Construction Co., Lincoln, treasurer. Replacing Milburn D. Johnson as secretary of the chapter is James R. Critchfield.



From left, Lew C. Curtis, retiring president of the Nebraska Chapter; National A.G.C. President A. S. Horner; and 1952 Nebraska Chapter President W. G. Scott.

Holderman, Peirce Re-elected

Contractors attending the annual meeting of the Ohio Highway Chapter, A.G.C., were given a first hand account of the Korean war by Wayne T. Geissinger, former labor relations counsel of the Ohio Contractors Association. Mr. Geissinger had just returned from a year's stay in the battle area as a member of the staff of Korean President Syngman Rhee. He expects to join the staff of the Korean Embassy in Washington as soon as he is released from the hospital where he is undergoing treatment for injuries.

Other speakers on the program were G. W. Maxon, national A.G.C. president from Dayton, and Arch N. Car-



Mr. Holderman, left, and Mr. Peirce

THE CONSTRUCTOR, MARCH 1952

CHAPTERS • BRANCHES

ter, Highway Division manager, national staff, Washington, D. C.

Officers for the year are V. N. Holderman, V. N. Holderman & Sons, Inc., Columbus, and Richard H. Peirce, Peirce Construction Co., Toledo, who were re-elected president and vice president, respectively. C. E. McKee was re-appointed executive secretary.

Minn. A.G.C. Elects Cook

Contractors from all parts of Minnesota attended the 33rd annual meeting of the A.G.C. of Minnesota held in St. Paul. During the three-day



Geo. F. Cook

meeting, George F. Cook, Geo. F. Cook Construction Co., Minneapolis, was elected to succeed John Dieseth, John Dieseth Co., Fergus Falls, as president of the chapter.

Other 1952 officers elected at the same time are A. H. Baumeister, Wm. Baumeister Construction Co., St. Paul, vice president for the Builders' Division; J. D. Meland, Jay W. Craig Co., Minneapolis, vice president for the Highway Division, and J. R. Howes, Hallett Construction Co., Crosby, vice president for the Heavy Division. H. V. Burnett, C. F. Haglin & Sons Co., Minneapolis, was elected secretary-treasurer and continuing as manager is R. J. Hendershott.

Directors for the year are S. R. Okes, Okes Construction Co., St. Paul; H. P. Phelps, Walter W. Magee Co., St. Paul; George Heller, Johnson, Drake & Piper, Inc., Minneapolis; and Messrs. Cook, Dieseth, Baumeister, Burnett, Howes and Meland.

Wage Demands Expected

Consensus of contractors representing all areas of the state is that unions are going to demand wage increases from substantial to record-breaking amounts during the year.

Seven ways in which contractors could better cooperate with architects were outlined by W. H. Tulser, Minneapolis, regional director of the American Institute of Architects. He advocated the following: Let subcontracts quickly; promptly return drawings to the architect; report unavailable materials to the architect; give the architect any ideas for simplifying con-

TWO GREAT VIBRATORS FOR GENERAL CONCRETE CONSTRUCTION!



THE IMPROVED
MORE POWERFUL
JACKSON
ENGINE-DRIVEN
FLEXIBLE-SHAFT
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Model FS-6A. Now furnished with a 6 H.P. engine, providing plenty of reserve power under all conditions, and vastly improved power take-off. Vibrator frequency (up to 7500 VPM) and amplitude are carefully balanced for maximum progress and thorough consolidation. It is available with 3 vibrator heads, for thick or thin sections. Shafting is furnished in 7' and 14' lengths up to 28'. Quickly adaptable to concrete rubbing, wet or dry, and drilling. Built to stand severe usage. By any comparison, it's the finest engine-driven vibrator on the market and the best buy! Complete details on request.

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2 1/4 H.P. MOTOR. FAST — RELIABLE

Has more than ample power for uninterrupted placing of the stiffest mixes, even when using the maximum length of shaft (28'). Provides 8,000 to 10,000 VPM. Built for trouble-free service.

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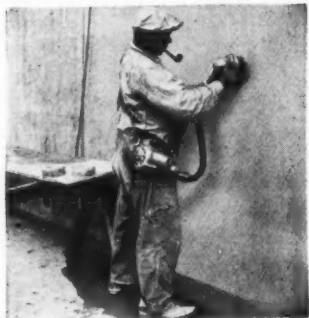
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Made of Steel—Good for reuse again and again on job after job indefinitely without repair. Reduce material costs way below wood—Many records of 400-500 and more uses.

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CHAPTERS • BRANCHES

struction; accept new materials and methods; work with the architect when problems develop, and take care of small details as they arise.

A \$2 billion decline in construction volume during the year was predicted by James D. Marshall, assistant managing director of the national A.G.C., Washington, D. C. Other speakers were Richard Vronson, assistant general counsel, National Production Authority; Dean M. Schweickhard, chairman of the Governor's Advisory Committee on Construction Controls; G. W. Price, manager of the Minnesota Trunk Highway Federation; M. J. Hoffmann, commissioner of highways for the state; T. L. Roswell, assistant director of the Office of Education's

Requirements Division; and John Magney, architect, who spoke on modular coordination.

Safety awards for the year were presented to seven firms. Winners in the above average exposure group are: 1st place, Sauers Construction Co., St. Paul; second, Madsen Construction Co., Minneapolis, and third, James Leck Co., Minneapolis. In the below average man-hour exposure group, winners are Gene Hurley Construction Co., St. Paul; M. E. Souther Construction Co., St. Paul, and August Cederstrand Co., Minneapolis. Winston Bros. Co. of Minneapolis and Herbert Reese of Greenbush were presented special awards for safety records made in previous years.



Kansas Construction Magazine

Kansas Builders Elect Douglas

Principal topics discussed at the 10th annual meeting of the Kansas Chapter, Builders Division, A.G.C., were the contractors' part in civil defense, labor relations, and unit price quotations on specialized types of work.

The group went on record that contractors would refuse to compute or bid jobs until the National Production Authority had given the owner and the architect the authority to go ahead with the job.

Pictured above are the 1952 officers of the chapter. Front row, left to right are Martin Dondlinger, Dondlinger & Sons Construction Co., Wichita, retiring president; Vice President Frank E. Blaser, Frank E. Blaser Building Co., Wichita; President William H. Douglas, Douglas Construction Co., Topeka, and Treasurer Cecil Hunter, O. D. Milligan Construction Co., Manhattan. In the back row, left to right, are Kenneth R. Lewis, secre-

tary-manager of the chapter, and Directors Val Borden, Val Borden Construction Co., Salina; E. J. Mitchell, E. J. Mitchell Construction Co., Wellington, and Carl Noland, Noland Construction Co., Dodge City.

Iowa Elects Van Buskirk

During the 30th annual convention of the A.G.C. of Iowa, Ray Van Buskirk, Ira Van Buskirk & Sons of Hawarden, was elected to succeed C. C. Diehl, Jefferson-Diehl, Inc., of Jefferson, as president. Mr. Diehl automatically becomes a member of the chapter's board of directors for three years.

Thomas O. Nobis of the Central Engineering Co., Davenport, and Kenneth W. Graves, Graves Bros. Co., Melvin, were elected vice presidents. Treasurer for 1952 is Don Kaser, Kaser Construction Co., West Des

CHAPTERS • BRANCHES

Moines, and O. W. Crowley continues as executive secretary.

At the three-day meeting John Butter, administration engineer, Iowa State Highway Commission, spoke on the state's 1952 highway program; Albert J. Robertson, senior vice president of the Iowa-Des Moines National Bank, spoke on banker-contractor relations; James D. Marshall, assistant managing director of the A.G.C., Washington, D. C., discussed price and wage controls; unemployment compensation problems were analyzed by Col. Claud M. Stanley, Employment Security Commission, Des Moines; and forecasts of highway construction and steel supplies were made by Arch N. Carter, manager of the A.G.C.'s Highway Contractors' Division, Washington, D. C., and J. W. Anderson of the Sheffield Steel Corp., Kansas City. H. W. Richardson, editor of *Construction Methods and Equipment*, New York, gave an address entitled, "The A.G.C. from a Publisher's Viewpoint."

Awards were presented to the winners of the Iowa A.G.C.'s accident prevention contest for 1951. The Gillotti Construction Co. of Des Moines received first place for no lost-time accidents in the class having more than 57,500 man-hours' exposure. In the class having less than 57,500 man-hours' exposure, the Mott Construction Co., Centerville, took first place.

Two of several resolutions called upon contractors to channel their scrap into proper outlets and to continue stressing accident prevention on their jobs.

Dunn Heads Michigan Group

The Michigan Chapter elected Ralph O. Dunn, Strom Construction Co., Grand Rapids, president for 1952, during its recent annual meeting in Lansing.

New vice president is Karl B. Foster, Karl B. Foster Construction Co., Flint, and treasurer is Henry A. Reniger, Reniger Construction Co., Lansing. George W. Combs is secretary-manager.

Directors are Cameron L. Davis, Mr. Dunn and Mr. Foster.

Speakers included J. Harry Green, manager of the Wisconsin Chapter, A.G.C., and Welton A. Snow, manager of the national A.G.C.'s Building Contractors' Division, Washington, D. C.

Plans were announced for a statewide bricklayer apprentice contest.

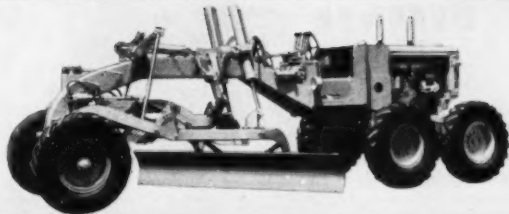
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**WARCO 4D-100 Heavy Duty 100 HP
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Builders of WARCO Motor Graders and HERCULES Road Rollers



Above, from left: Vice President W. Ray Rogers, 2nd Vice President Harry I. Hamilton, and Treasurer Frank Lyons, of the Portland Chapter.
Left: Natt McDougall (center), chapter's first president in 1920 and 1921, watches 1952 President Herb G. Palmberg (left) receive gavel from retiring 1951 President Henry A. Kuckenberg.

Ackersd Photog., Inc.

Portland Chapter Names H. G. Palmberg

• Gavels Presented to Natt McDougall, Other Past Presidents

» AT THE annual meeting of the Portland Chapter, A.G.C. (Oregon), Herb G. Palmberg of the H. G. Palmberg firm, Astoria, was elected president for 1952. New vice president is W. Ray Rogers, Rogers Construction

Co., Portland, and 2nd vice president is Harry I. Hamilton, Hamilton & Thoms, Eugene. Frank Lyons, Frank Lyons Co., Portland, is secretary-treasurer and A. H. Harding continues as manager.

A special feature of the meeting was the presentation of inscribed, silver-banded gavels to the chapter's past presidents starting with Natt McDougall who was the first to take the office in 1920.

Past Presidents Named

Other past presidents were J. M. Dougan, 1922; A. J. Welton, 1923; C. J. Cook, 1924; W. H. Feigenson, 1925-1926; T. W. Baker, 1927; Carl M. Stebinger, 1928; C. T. Parker, 1929; W. T. Jacobsen, 1930; J. C. Compton, 1931; P. L. Crooks, 1932-1933; C. A. Schram, 1934-1935; M. J. Lynch, 1936-1937; H. A. Dick, 1938-1939; G. E. Kibbe, 1940; Theodore Arenz, 1941; K. F. Jacobsen, 1942; J. R. Winger, 1943; Jack McDougall, 1944; S. S. Montague, 1945; Louis A. Peacock, 1946; Don Hall, 1947; Marshall Newport, 1948; Ray H. Northcutt, 1949; Karl F. Jacobsen, 1950 and H. A. Kuckenberg, 1951.

Other Chapter Elections

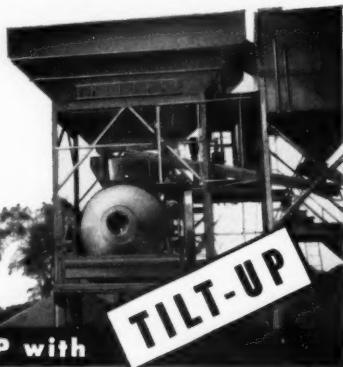
Many chapters and branches of The Associated General Contractors of America have elected officers at recent meetings as follows:

Pipe Line Contractors Association met with tragedy when A. L. Forbes, Jr., Associated Pipe Line Contractors, Inc., Houston, died of a heart attack on the day following his election to the presidency of the association (page 87). Replacing him is Robert A. Coyne, Coyne Construction Corp., San Pablo, Cal.

Other 1952 officers are M. S. Williams, Anderson Bros. Corp., Houston, vice president; and C. C. Bledsoe, Midwestern Constructors, Inc., Tulsa, treasurer. Executive secretary is Richard A. Gump.

Speakers at the annual meeting in-

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**YOUR
DEFENSE
JOBS**



... and CLEAN UP with

The SuPREMIX Expressway Package helps you push those rush jobs through. This semi-portable central mix plant is readily moved from site to site, is doing a man-sized job everywhere. Eliminates long costly hauls. The Tilt-up feature of the 3-yard SuPREMIX gives the Expressway an extremely low overall height of 37' or less. And it's the only easily craned central mix plant with 12' clearance under the cone. Easy set-up and quick disassembly is a snap! Great for highway jobs, too. You save and make money with the SuPREMIX Expressway.

The SuPREMIX is equally ideal for

• Converting to Central Mix... the only mixer feasible in most existing plants. No need to raise your plant or lower drive since it requires less head room • Permanent Package Plants... designed and built by originators of the package plant idea. Reduced plant height means reduced construction, operation and maintenance costs • Write or wire for new bulletin and location of our representative near you.



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CHAPTERS • BRANCHES

cluded Gardiner Symonds, Tennessee Gas Transmission Co., who outlined the history and future of pipe lines (see page 43); Iverson Walker of Carrington, Gowan, Johnson, and Walker, Dallas; J. C. Sterling, Service Pipe Line Co., Tulsa; Karl L. Feters, Youngstown Sheet & Tube Co., Youngstown, Ohio; and Harmon S. Eberhard, Caterpillar Tractor Co.

Following the address of John W. Volpe, Volpe Construction Co., Malden, Mass., on accident prevention, Mr. Gump presented the newly published "Safety Manual for Pipe Line Construction" prepared by the chapter.

Directors are J. C. Britton, Mr. Coyne, R. H. Fulton, F. M. Johnson, R. D. Sheehan, Robert Thomas, T. A. Hester, M. S. Williams, R. L. Smith, C. C. Bledsoe and H. C. Price.

Indiana General Contractors' Association elected Clyde R. Yater, president; H. D. Tousley, vice president; and Frank W. Hanson, secretary-treasurer. Executive secretary is C. O. Holmes.

Principal speaker at the annual meeting was W. A. Snow, manager of the national A.C.C.'s Building Contractors' Division.

Virginia Branch elected B. F. Parrott of B. F. Parrott & Co., Inc., Roanoke, president; W. C. English of English Construction Co., Altavista, vice president; and Ray Long, Ivy Construction Corp., Charlottesville, secretary-treasurer. Branch secretary is Herbert O'Grady.

Annual meeting speakers were H. E. Foreman, managing director of the A.G.C., Washington, D. C., and J. Lindsey Almond, Virginia Attorney General.

Directors are W. H. Scott, Franklin; F. L. Showalter, Lynchburg; J. D. Shockey, Winchester; W. A. Hall, Norfolk; C. W. Barger, Lexington; J. W. Daniel, Wanville; C. C. Carpenter, Norfolk; Mr. Long; J. M. Turner, Roanoke; C. N. DeLashmott, Arlington; John Russell, Richmond; Mr. Parrott; Lee Paschall, Richmond; Mr. English; and H. D. Hinman, Newport News.

A.G.C. of Maine, Inc., chartered in Nov., installed the following officers during its annual meeting: President, William J. Salter, Augusta; 1st vice president, Danato Profenno, Portland; 2nd vice president, Carl Cianchette, Pittsfield; 3rd vice president,



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too Small"



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The Aetna Life Affiliated Companies write practically every form of insurance and bonding protection

LIFE AND CASUALTY

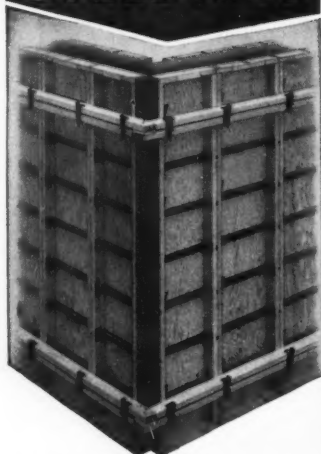
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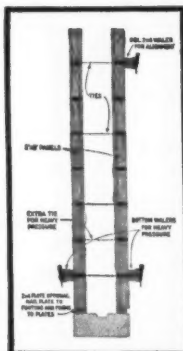
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CHAPTERS • BRANCHES

Paul Wyman, Waterville; and secretary-treasurer, Eric Sanders, Portland. Executive secretary is Burleigh Martin, Augusta.

Directors are T. W. Cunningham, Bangor; Walter Mitton, Augusta; Ellis C. Snodgrass, Portland; Donald McKay, Houlton; and Gerald Constant, Bangor.

Speakers were Roland Oaks, executive secretary of the A.C.C. of New Hampshire, and Vin Swanburg, also of the New Hampshire chapter.

Colorado Contractors Association, Inc., elected Dan G. Bell, Peter Kiewit



D. G. Bell

Sons' Co., Denver, as president. 1st vice president is C. M. Hanes, C. M. Hanes Construction Co., Denver; 2d vice president, Walter Schmidt, Schmidt Construction Co., Grand Junction; secretary-treasurer, Jack Harrison, Harrison Construction Co., Denver; managing director, Earl Devalon.

Directors for 1952 are Carroll Brown, Brown Construction Co., Pueblo; Forrest S. Crocker, Crocker & Ellett, Inc., Denver; Robert Hinman, Hinman Bros. Construction Co., Ft. Collins and Denver; C. L. Hubner, C. L. Hubner Co., Denver; James B. Kenney, Sr., James B. Kenney, Inc., Denver; Hoyle Lowdermilk, Lowdermilk Bros., Denver; and Walter Steinwald, Colorado Constructors, Inc., Denver.

Florida West Coast Chapter elected

Roy E. Secord, Paul Smith Construction Co., Tampa, president; Norbert Fuller, C. A. Fielland, Inc., Tampa, vice president; and W. H. Mills of Mills & Jones, Inc., St. Petersburg, secretary-treasurer.

Directors are J. L. Cone of Cone Bros. Contracting Co., Tampa; R. E. Carlson, Sr., of R. E. Carlson, Inc., St. Petersburg; T. Van Eyck, general contractor, Tampa; M. R. Boyce of Boyce Co., Clearwater; J. L. Ewell of Ewell Construction Co., Lakeland; J. S. Stephens of J. S. Stephens & Son, Tampa; and retiring president, Jack O'Brien, St. Petersburg.

Master Builders of Iowa elected

Frederick W. Mast, Waterloo, president; Gordon F. Priestner, Davenport,

vice president; Gordon F. Wickers, Des Moines, secretary; and John Ringland, Des Moines, treasurer.

Those officers and the following compose the 1952 board of directors: K. W. Gethmann, Gladbrook; Carl Henkel, Mason City; B. A. Johnson, Storm Lake; Paul McCorkle, Sac City; and Clarence W. Smith, Ft. Madison. Included is W. W. Moeller, executive secretary.

Speakers who addressed the 40th annual meeting of the chapter are W. A. Snow, manager of the Building Contractors' Division, and James D. Marshall, assistant managing director, national A.G.C., Washington, D. C.; John D. Moreschi, International Hod Carriers, Building and Common Laborers Union of America, Chicago; Col. Henry J. Hoeffer, Corps of Engineers, Omaha; C. C. Woodburn, Iowa Chapter of the American Institute of Architects, Des Moines; H. W. Richardson, editor, *Construction Methods and Equipment*, New York; Hardy M. Ray, Technical Coordination Division, Defense Production Administration, Washington, D. C.; Joseph R. Collins, National Production Authority, Kansas City; Peter J. Eibach, Office of Price Stabilization, Des Moines; Walter W. King, regional director, Department of Labor, Kansas City; and Arch Ward, sports editor, *Chicago Tribune*, Chicago.

Chattanooga Chapter re-elected President John Martin, Sr., Vice President Homer Parks and Secretary-treasurer H. M. Collins. Jere Tipton is counsel.

Directors are Lee A. Warlick, O. B. Davis, George Verhey and Mark K. Wilson, Jr.

Montana chapters: Montana Contractors' Association officers are Edward M. O'Neil, president; Stephen A. Birch, vice president; and Frank Fly, treasurer. Directors are C. Harry Bjerknes, W. H. McIntyre, George Nilson, M. O'Brien and Elmer Schye.

Montana Building Chapter officers are E. J. Decker, president; Frank Messmer, vice president; and L. G. Hardy, treasurer. Directors are P. B. Anderson, William R. Lowe and E. T. Mitchell. Secretary-manager of both chapters is J. W. Marlow.

Oklahoma Builders Chapter elected Earl Tankersley, Builders' Construction Co., Oklahoma City, president; W. C. Shelton, Lawton, and H. R. Lohmann, Tulsa, vice

CHAPTERS • BRANCHES

presidents; and H. R. Jensen, Oklahoma City, secretary-treasurer.

Directors are Robert Parks, Oklahoma City; Larry T. Brooks, Tulsa; C. H. Smith, Tulsa; Erick Lippert, Oklahoma City; Link Cowen, Shawnee; and H. E. Mefford, Enid. Executive secretary is Ruth Anne Leslie.

Association of Oklahoma General Contractors re-elected John C. McConnell, Oklahoma City, president; J. A. Raines, Muskogee, vice president; and Veldo Brewer, Holdenville, secretary-treasurer. Glenn McDonald continues as manager.

Directors are W. D. Amis, Jack Tway, E. E. Park and W. E. Steelman of Oklahoma City; N. Smith, El Reno; and J. O. Pharoah, Henryetta.

Louisville Chapter elected H. G. Whittenberg, president; A. J. Schneider, 1st vice president; G. I. Rommel, 2nd vice president and K. A. Barker, treasurer. D. R. Lyman is secretary and manager of the chapter.

Directors are J. F. Nicoulin, Donald Bornstein, G. C. Eady, E. T. Sullivan and Stanley Litchefeld.

Northern California Chapter elected Harold O. Parish of Parish Bros., Benicia, president; Dallas Young, MacDonald, Young & Nelson, Inc., San Francisco, vice president; and B. F. Modglin, M & K Corp., San Francisco, treasurer. W. H. Arata is secretary-treasurer.

The board of directors is composed of Messrs. Parish, Young and Modglin; Ralph W. Brown, Mercer Frasier Co.; E. L. Clements, Clements & Co.; Ben C. Gerwick, Jr., of Ben C. Gerwick, Inc.; Chas. H. Harney of Chas. H. Harney, Inc.; A. E. Holt, Guy F. Atkinson Co.; Jack How, Edward R. Bacon Co.; H. C. Maginn, Calaveras Cement Co.; John F. O'Connell, Bechtel Corp.; H. Earl Parker of H. Earl Parker, Inc.; Gordon Pollock of Geo. Pollock Co.; and J. E. Wilkinson, Granite Construction Co.

Baltimore Builders Chapter elected William H. Goertz, Morrow Bros., president; Herbert R. Leimbach of Leimbach Construction Co., vice president; and re-elected Ralph W. Young, Young & Adams, Inc., secretary-treasurer.

Directors are Philip Vizinni of Vizinni & Son, Inc.; Herbert R. Frantz, Sr., of Frantz Construction Co.; and Parlett Davis of Davis Construction Co. Henry D. Romer is manager.

THE CONSTRUCTOR, MARCH 1952



GEORGE O'CONNOR'S

CLEVELAND DUG 17,200 FEET OF TRENCH IN 9 HOURS

Even under ideal conditions 3 1/4 miles of 22" x 40" trench in one day is pretty fair digging for a single trencher. Naturally, CLEVELANDS don't set records like this every day. But even when they are digging only 200 feet per day under adverse soil and project conditions you can be sure that CLEVELANDS are performing just as profitably as George O'Connor's did for him. CLEVELAND's wide range of transmission-controlled combinations of digging wheel and crawler speeds give you the right speed for every job—just one of the many features which make CLEVELANDS preferred by men who base their judgment on *proved performance*.

See your local distributor. Get the full story on these CLEVELAND features:

- ✓ DEPENDABILITY ✓ EASE OF OPERATION
- ✓ UNIT-TYPE CONSTRUCTION ✓ VERSATILITY ✓ BALANCE
- ✓ WIDE SPEED RANGE ✓ MANEUVERABILITY

THE CLEVELAND TRENCHER CO.

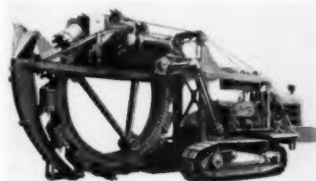
20100 ST. CLAIR AVENUE

CLEVELAND 17, OHIO

Trenchers—Parsons Co., Newton, Iowa. Two new model "Trenchliners" are crawler-mounted, wheel-type machines. Model 202 is designed primarily for drainage and utility trenching. Model 215 is special pipeline machine. Model 202 is equipped to dig in 30 separate feeds from 6.2" to 18.5" per minute, and in 9 widths from 13" to 31" and up to 6' deep. It is offered with 52 h.p. gasoline or 55 h.p.

diesel engine. Other features include friction clutch control of digging wheel, easily changed bucket-fronts with cutting lips or "Tap-In" teeth, shiftable and reversible belt conveyor for discharging spoil on either side of machine. Crawlers have either 16" or 20" treads. For laying drainage tile, special box and chute are available as optional equipment. Model 215 has 6 digging wheel speeds up to

11.2 r.p.m., standard-make tractor-type crawlers with lug-type shoes, 18" treads and choice of 2 standard-make 55 h.p. diesel engines.



Model 202 "Trenchliner"

A Multiple Line Company



It's Wise to Centralize

CENTRAL SURETY AND INSURANCE CORPORATION

CONDENSED FINANCIAL STATEMENT, DECEMBER 31, 1951

ASSETS	
Cash (in banks and offices).....	\$ 1,176,836.74
Bonds:	
U. S. Government.....	\$ 5,808,742.64
State, County and Municipal.....	9,300,204.52
Federal Banks.....	175,000.00
	15,283,947.16
Stocks:	
Public Utilities.....	419,800.00
Banks.....	56,960.00
Central Surety Fire Corporation.....	611,880.28
	1,088,640.28
Total Cash and Invested Assets.....	\$17,549,424.18
Agent's Balances (not over 90 days).....	1,570,279.30
Accrued Interest on Investments.....	89,755.57
Other Assets.....	116,247.97
TOTAL ASSETS.....	\$19,325,707.02
LIABILITIES	
Reserve for Claims and Losses.....	\$ 6,964,740.25
Reserve for Unearned Premiums.....	6,104,578.95
Total Claim, Loss, and Premium Reserves.....	\$13,069,319.20
Reserve for Taxes and Other Liabilities.....	631,193.86
Total Reserves.....	\$13,700,513.06
Capital.....	\$ 2,000,000.00
Surplus.....	3,625,193.96
Surplus to Policyholders.....	\$ 5,625,193.96
TOTAL.....	\$19,325,707.02

Securities carried at \$1,190,915.05 in the above statement are deposited for purposes required by law.

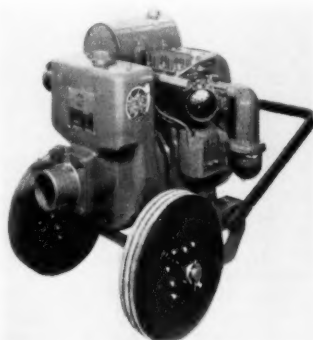
Bonds are carried at amortized values. No bonds were in default either as to principal or interest at December 31, 1951.

HOME OFFICE KANSAS CITY, MISSOURI

R. E. McGINNIS, President

CENTRAL SURETY PROTECTION Is Written Through Licensed Agents and Brokers Only

Pumps—Marlow Pumps, Ridge-wood, N. J. New line of self-priming centrifugal pumps feature simplicity of construction. Pump is made up of check valve assembly, tank, diffuser, impeller and shaft seal. Check valve is mounted on outside. Tank is cast in one piece and may be removed by loosening one circle of bolts. Diffuser is held in place by tank and can be lifted off impeller when tank is removed. One cap nut must be loosened to remove impeller. Both suction and discharge connections are male-threaded and hose connections are made directly to pump. Pumps are available with capacities up to 240,000 g.p.h. This includes all A.G.C. sizes plus several others not rated by A.G.C. Special high-pressure models for water supply and jetting are available. Pumps can be changed from base-mounted units to steel wheel or pneumatic tire mounted units without changing base. Models equipped for burning kerosene or powered by diesel engines are available as stock items.



Marlow self-priming centrifugal pump

NEW EQUIPMENT • MATERIALS

Tamper—Gar-Bro Manufacturing Co., 2415 E. Washington Blvd., Los Angeles 21. "Power-tamp," for tamping concrete for floors, sidewalks and tilt-up slabs, eliminates voids and provides vibratory action which tamps in rock and brings up mortar to make finishing job easier. It is especially useful in low slump concrete which is difficult to hand-tamp. It is designed for one-man operation. It has automatic clutch and governor-controlled speed adjustable from 500 to 1,500 tamps per minute. All bearing surfaces are protected from mortar and dust. Two-quart capacity gasoline tank enables continuous operation for 4 hours without refueling. Float is of abrasion-resistant molybdenum steel.



Gar-Bro "Power-tamp"

Pneumatic Impact Wrench—Independent Pneumatic Tool Co., Aurora, Ill. "Thor" No. 24 $\frac{3}{8}$ " portable pneumatic reversible impact wrench is available with 2 types of spindles—Size 24 with $\frac{1}{2}$ " square drive and Size 24S with $\frac{7}{16}$ " hexagon quick change chuck integral with spindle. Equipped with side handle and trigger-type throttle, wrench weighs $5\frac{3}{4}$ lbs. and is $8\frac{11}{16}$ " long. Reversing valve is located at back of tool. Wrench is powered by air motor which transmits power to impact mechanism through torque-increasing planetary gear system.



"Thor" No. 24 impact wrench

THE CONSTRUCTOR, MARCH 1952

Many Costly Fires Like This Are PREVENTED by "AKBAR" —

The KINNEAR Steel Rolling Fire Door



40% of the biggest fires in a single year showed lack of fire-door protection as contributing to the heavy losses.*

You get *positive, automatic, dependable* fire protection at doorways and windows with Akbar Fire Doors. They're *pushed* downward by a strong spring . . . *controlled* in downward speed . . . and operable *after* closure, for emergency use.

These efficient doors remain coiled out of the way, overhead, when not in use, but lower *automatically*, with speed, efficiency and *safety*, when fire threatens. They combat fire loss by cutting off drafts, blocking flames, and confining fire to small areas.

Approved and labeled by Underwriters' Laboratories, they have saved as much as 33% of their cost *annually*, in reduced insurance rates. Built to fit windows, doorways or other openings of any size.

"Akbar" Doors can also be equipped for daily service use, with or without motor operation. But standard (non-labeled) Kinnear Rolling Doors are preferred for service use where extra fire protection is not needed.

The KINNEAR Manufacturing Co.

FACTORIES:

650-680 Fields Avenue, Columbus 16, Ohio
1742 Yosemite Ave., San Francisco 24, Calif.

Offices and Agents in All Principal Cities

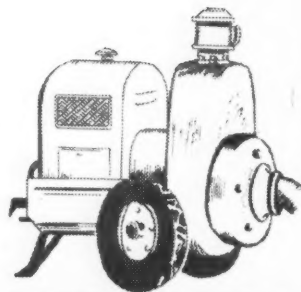
* (As reported in the Jan. 1947 Quarterly of the National Fire Protection Association.)

SAVING WAYS
IN
DOORWAYS

KINNEAR
ROLLING DOORS

How To Judge a Pump

NEW EQUIPMENT • MATERIALS



An A.G.C. Standard Plate is like a BLUE RIBBON! If a pump is wearing the A. G. C. label—don't hesitate to give it an "A No. 1" rating at first glance. For to be tagged with the A. G. C. label, pumps must meet certain basic standards of performance established by the Pump Bureau and approved by the A. G. C. Through the Pump Bureau—the reliable pump manufacturers listed below guarantee the standards approved by the A. G. C.



CONTRACTORS PUMP BUREAU

(Established 1938) Affiliated with
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC.
Munsey Building, Washington 4, D. C.

STERLING MACHINERY CO.
Los Angeles, California

WORTHINGTON PUMP & MACH. CORP.
Construction Equipment
Division
Dunellen, New Jersey

LEYMAN MFG. CORP.
Cincinnati 2, Ohio

BARNES MANUFACTURING CO.
Mansfield, Ohio

CARVER PUMP CO.
Muscatine, Iowa

C. H. & E. MANUFACTURING CO.
Milwaukee, Wisconsin

CHAIN BELT CO.
Milwaukee, Wisconsin

CONSTRUCTION MACHINERY CO.
Waterloo, Iowa

THE GORMAN-RUPP CO.
Mansfield, Ohio

THE JAEGER MACHINERY CO.
Columbus, Ohio

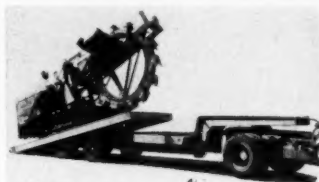
MARLOW PUMPS
Ridgewood, N. J.

HOVO ENGINE CO.
Lansing, Michigan

RICE PUMP & MACHINE CO.
Grafton, Wisconsin

ESSICK MANUFACTURING CO.
Los Angeles, California

Trailer—La Crosse Trailer Corp., La Crosse, Wis. Gooseneck-type trailer with tilting platform, for transporting heavy machinery with standard fifth wheel tractors, is available in 14-, 18- and 22-ton capacity. Known as Model GTTA, it is of tandem axle design with 96" wide platform which is tilted into loading position by releasing simple lock at front. Two double-acting hydraulic cylinders cushion load during tilting. After load is in place, platform locks automatically in horizontal position for hauling. Trailer is equipped with "walking beams" supporting axles to provide oscillation for equal load distribution. Constant rise S cam brakes operated by worm gear slack adjusters assure perfect braking contact. Trailer carries 8 15" tires with extra-wide base rims and is available with either air or vacuum brakes. Three lash hooks on each side are standard equipment. Lights, reflectors, stake pockets and other accessories are available at extra cost.



La Crosse trailer tilted for loading

Chain Connecting Links—Interstate Drop Forge Co., 4001 N. 27th St., Milwaukee 9. "Universal" design has been introduced in "Wedglok" safety connecting links for carbon and alloy chains. Only 2 sizes of links are needed to connect any size chain from 1/4" to 3/4", according to manufacturer. "Wedglok" spacer is in compression when link is carrying load and it will not shear or loosen if projecting spacer points are properly peened.

Cutting Tool Lubricant—Tap & Drill E-Z Corp., 11033 Hawthorne Blvd., Inglewood, Calif. "Lubri-Cut" is cooling and lubricating agent for taps, drills and cutting tools. It is fire-resistant compound, free from abrasives and acids. It is available in paste and semi-paste form. "Lubri-Cut" permits tolerances in millionths and is equally efficient on hard and soft ferrous and non-ferrous metals, on plastics or on glass, manufacturer claims.

NEW EQUIPMENT • MATERIALS

Fork-Lift Attachment for "Moto-Bug"—Kwik-Mix Co., Port Washington, Wis. Power-driven 5' fork-lift attachment for power wheelbarrow has capacity rating of 1,000 lbs. at 15" load center. It can climb 12% grade with full load and has 61" turning radius. Unit operates from power-driven hydraulic pump. It is interchangeable with other front-end attachments of "Moto-Bug."



Fork lift for "Moto-Bug"

Bulk Materials Conveyor—Mar-Rail Conveyor Co., Providence, R. I. Bulk materials attachment for "Brik-Toter," portable masonry materials conveyor, converts it into conveyor for sand, gravel and other bulk materials. Hopper and side guards prevent spillage and overloading. In many cases upper end of "Brik-Toter" may be placed directly over truck.

Diesel Engines—Cummins Engine Co., Columbus, Ind. Full-flow lubrication system and continuous groove main bearings have been introduced on engine models H-600, HR-600, HS-600, and HRS-600 allowing increase in continuous operating speeds from 1,600 to 1,800 r.p.m. Engines may now be coupled directly to centrifugal pumps that operate at speed of 1,750 r.p.m. as well as to generators operating at synchronous speeds of 1,800 r.p.m.

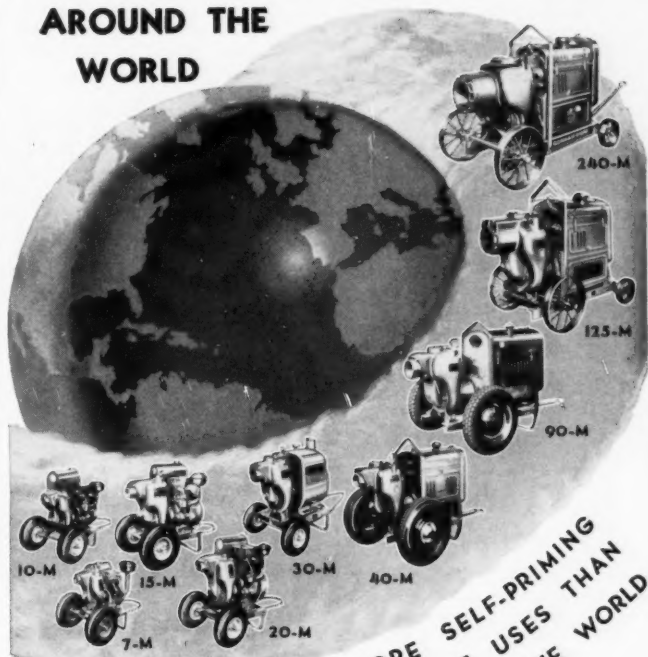
Mixing Plant—Wood Manufacturing Co., P.O. Box 620, North Hollywood, Calif. Traveling mixing plant, Model 42 "Roadmixer," is powered by I.H.C.-UD18A rated at 125 h.p. at 1,600 r.p.m. Model 42 is self-powered and self-propelled with mixing capacity up to 200 tons per hour.

THE CONSTRUCTOR, MARCH 1952

GORMAN-RUPP

SELF-PRIMING CENTRIFUGAL PUMPS

AROUND THE WORLD



GORMAN-RUPP BUILDS MORE SELF-PRIMING CENTRIFUGAL PUMPS FOR MORE USES THAN ANY OTHER PUMP MANUFACTURER IN THE WORLD



For every requirement and range in capacity from 1000 GPH to the big 10 inch pumping 240,000 GPH the most dependable pump is the Gorman-Rupp.

They will pump more dirty water, more hours, with less fuel, will prime quicker and at higher suction lifts than any other comparable self-priming pump. And -- Gorman-Rupp pumps are guaranteed in plain language by us and our distributors.

Contractors' Pump Bulletin 8-CP-11 furnished on request.

A Complete Line of Engine Powered and Electric Motor Driven Self-Priming and Non-Self-Priming Centrifugal Pumps.

THE GORMAN-RUPP COMPANY
MANSFIELD, OHIO

Dry Brick Walls—*Louisville Cement Co., Speed Bldg., Louisville, Ky.* Specifications recommended to secure dry brick walls are presented in booklet (A.I.A. File No. 5-M). It presents facts obtained in 20 years' research into problem of preventing water from passing through brick walls and recommends certain precautions which should be included in specifications. Illustrations and descriptions

show how faulty brick-laying causes cracks through which water passes. Methods of working so as to prevent leaks are described.

Engines—*Nordberg Manufacturing Co., Milwaukee 1.* Design and operation features of one-, 2- and 3-cylinder Type 4FS diesel engines are illustrated and described in Bulletin 194. Design features, kilowatt ratings and

pumping capacities of various models are given. Photos show typical applications of engines. Cross-section view shows construction features.

Tractors—*Caterpillar Tractor Co., Peoria 8, Ill.* Mechanical features of D2 tractor are presented in catalog (Form 30284). It explains how machine is built, what it is like and how it performs. Typical jobs are shown, along with reports from owners. Specifications are included.

Graders—*J. D. Adams Manufacturing Co., Indianapolis 6.* Catalog (Form 5110) illustrates and describes complete line of Adams equipment. Motor graders and pull-type graders are shown at work on all types of jobs. Adams "Traveloader" is featured. Brief specifications and catalog views are included on all machines.

Rollers—*Huber Manufacturing Co., Marion, Ohio.* Three-wheel rollers are presented in Bulletin H-150. Illustrations and information describe 8-, 10-, 12- and 14-ton rollers, gasoline and diesel. Comprehensive explanation is given of various parts of machines and general-purpose duties are described.

Heat Machines—*Fageol Heat Machine Co., 5725 Elliott Ave., Detroit 11.* Bulletin L-4782 presents new line of heat machines. Illustrations and line sketches explain principle of spraying heated air out at floor level to form blanket of warm air in working areas. Two models, PW-140 and VO-160 are illustrated and complete dimensions and specifications are listed.

Roof Construction—*Follansbee Steel Corp., Pittsburgh 30.* "How to Construct a Batten Seam Roof" is subject of article in fall 1951 issue of *Terne Topics*. Starting with unrolling of seamless terne metal roll and concluding with soldering of all joints which are not double-locked, step-by-step procedure for laying batten roof is shown in 22 illustrations. Also reproduced is estimator which provides coverage data on 50' terne rolls, listing standard measurements to be reckoned for standing, flat-locked and batten seams.

Protective Coatings—*The Flintkote Co., Industrial Products Division, 30 Rockefeller Plaza, New York 20.* Standard and specialized asphalt emulsions and cutbacks, asphalt, rubber



In floor fill

in roof fill

Permalite expanded perlite aggregate gives you concrete with only $\frac{1}{2}$ to $\frac{1}{3}$ the weight of sanded concrete. The great saving in deadweight can not only sharply reduce requirements in structural steel but also cut construction time and costs.

Permalite offers you consistent, rigidly controlled quality on every job, first bag to last. In its weight class, Permalite mixes require less water, have less drying shrinkage, higher strength, less absorption and have greater resistance to freezing and thawing.

Leading architects are specifying Permalite for all types of construction—industrial buildings, schools, hospitals, defense housing and military buildings. For full facts and specification data see your Sweet's File or send for new Permalite brochure; Great Lakes Carbon Corporation, 18 East 48th St., New York 17, N. Y., Dept. 153.



- ✓ Reduces deadload
- ✓ Cuts steel needs
- ✓ Lowers heat loss
- ✓ Fire resistant
- ✓ Availability unlimited
- ✓ Quality controlled
- ✓ Perlite Institute approval

MAKES BETTER PLASTER, TOO

U.L. approved Permalite/plaster carries maximum fire ratings up to 4 hours—does a faster, easier job of fireproofing structural steel. On walls and ceilings, it assures lighter, more crack-resistant base coats.

Permalite®

THE LEADING
PERLITE
AGGREGATE

A Building Product of Great Lakes Carbon Corporation and its Exclusive Permalite Licensees

NEW LITERATURE

and resin adhesives, coatings and sealers offered by Flintkote are briefly described in *Industrial Products Digest*. Protective coatings, flooring binders and cements, underlayments for decorative floors, sound deadener and insulating compounds, sealers for joints in concrete pavement and other items are described.

Truck-Crane—*Bucyrus-Erie Co., South Milwaukee, Wis.* Hydraulic "Hydrocrane" is presented in booklet entitled *Busy as a Bee*. More than 100 illustrations show machine with its many attachments placing tanks and pipe; digging, trenching and backfilling; hoisting and erecting; loading, unloading and stockpiling; cleaning catchbasins; removing snow and stumps; cleaning up in quarries, mines and streets.

Hardfacing—*American Manganese Steel Division, Chicago Heights, Ill.* Wall chart details proper hardfacing rods for specific jobs. It divides welding into basic operations, under which are listed equipment parts to be "Amscoated," together with recommended rod, available sizes and preferred method of application. Fuller description of uses of each rod is included. Chart is 17"x26" with tabs for easy hanging and has lacquered surface to keep it readable.

Tractor Tools—*Hyster Co., Portland 8, Oreg.* Tools for use with Caterpillar tractors and equipment are pictured and described in Catalog 1191. Complete line of Hyster tractor tools is presented and practical applications shown.

Roads Must Fit Traffic

"We must adopt the philosophy of building roads to fit the traffic, and never knuckle down to the shoe-horn philosophy that says 'squeeze the traffic to fit the roads,'" E. D. Bransome, president and chairman of the board of Mack Trucks, Inc., told the New Mexico Motor Carriers Association at their meeting at Hobbs, N. Mex., January 18.

Mr. Bransome told the meeting his company is increasing its efforts to aid highway transportation and that this year it would double its public relations activities in behalf of a better trucking industry and would try to awaken the public to the harm done by restrictive regulations.

Reclaiming coal



Rupp Brothers, Incorporated, general contractor of Kittanning, Pennsylvania, use one of their five MICHIGAN Truck Excavators to reclaim coal for the Powell Coal Company. Coal formerly lost by diverting coal washings into rivers and streams is now pumped into settling pits and reclaimed by the mine. Rupp Brothers use this ½-yard MICHIGAN clamshell to spread the still wet coal dust over high ground for drying.

Says operator Ken Rupp: "MICHIGANS are tops with me. They're fast and easy to maintain. I especially like the air controls". States A. L. Rupp, president: "Our MICHIGANS require very, very little maintenance. They're always available so we get contracts others can't handle because their equipment is tied up for repairs".



Make your next excavator-crane a MICHIGAN . . . you, too, will be 'way ahead. Send for details.

MICHIGAN POWER SHOVEL COMPANY
485 Second Street, Benton Harbor, Michigan, U.S.A.

THE NEW F/S OPTICAL PLANIMETER



An exclusive F/S patent design which eliminates eye-strain increases precision and speed.

- New free-wheeling, wide-angle, magnifying lens has built-in tracing point—glides smoothly along outline, will not stick or tug—eliminates parallax.
- Finger-flick Zero Setting Control brings both wheels automatically to zero—eliminates need for initial readings and for handling measuring wheel.
- Enclosed wheel carriage keeps out dust and maintains high precision—incorporates plexiglass lens to simplify wheel readings.
- Model 236V—adjustable-arm planimeter, \$58.00.
Model 236F—fixed arm, \$52.00.

TRANS-GLOBAL COMPANY
1480 Broadway, New York 18, N. Y.
AMERICAN DISTRIBUTORS FOR—



**FILOTECNICA
SALMOIRAGHI
S.P.A. Milan**

MANUFACTURERS' NOTES

J. P. Blaul has been elected president of DIAMOND IRON WORKS, INC., and Mahr Manufacturing Co. Division following the resignation of L. J. Reay. Mr. Reay will continue to serve on the board of directors.

J. R. Steelman, formerly vice president in charge of sales, has been elected president of KOEHRING Co. and its 4 subsidiary companies. He succeeds G. E. Long, who will remain as chairman of the board. E. A. Brugger has been elected vice president and general manager. He was previously vice president in charge of production.

D. J. Carroll Copps has been appointed general manager of ATLAS POWDER Co.'s explosives department. He had been assistant general manager since January 1951.

E. D. Tull has been named vice president for personnel and plant of CUMMINS ENGINE Co. He had been manager of manufacturing since April 1950.

Arthur F. Dries has been appointed manager of sales promotion and advertising of GAR WOOD INDUSTRIES.

George J. Wellner, formerly with the First National Bank of Chicago, has been elected assistant treasurer of CATERPILLAR TRACTOR Co., succeeding George L. Scripps, who has been named secretary-treasurer of Trackson Co., Caterpillar subsidiary. William G. Thannert, general planning superintendent of Caterpillar since 1949, has been named factory manager of Trackson.

J. W. Mohler, assistant director of sales for CATERPILLAR TRACTOR Co., will become deputy director of the Construction Machinery Division of NPA on March 15 and will serve for one year.

BARBER-GREENE Co. announces the appointment of 2 assistant sales managers. Harold W. Newton has been assigned to the conveyor division. William C. Gifford is assistant manager of machine sales.

Kenneth C. Towe has been elected president of AMERICAN CYANAMID Co., succeeding Raymond C. Gaugler, who died January 11. Mr. Towe was formerly vice president in charge of finance.

C. B. Smythe has been elected president of the Power Crane and Shovel Association. Mr. Smythe is president of the THEW SHOVEL Co.

Chester H. Lehman, identified with BLAW-KNOX COMPANY for 42 years, has retired as executive vice president. He will continue as a director and vice chairman of the board.

Paul R. Ehr Gott has been appointed assistant to the resident vice president of BALDWIN-LIMA-HAMILTON CORP., LIMA-HAMILTON DIVISION. He will also serve as sales manager in charge of all sales of shovels of 3 yards capacity and larger. J. W. Hardisty has been named sales manager of small shovels and cranes.

DETROIT STEEL PRODUCTS Co. announces the retirement of H. F. Wardwell, chairman of the board; E. R. Ailes, treasurer; R. W. Weed, vice president in charge of eastern sales; J. P. Donohue, traffic manager; F. J. Williams of the sales department. C. G. Bunting becomes secretary-treasurer, A. E. McKenzie, eastern regional sales manager and Harold Gilecek, traffic manager.

Obituary

Joseph R. Williams, 57, product manager of pavers and portable mixers at the Dunellen, N. J., plant of Worthington Pump and Machinery Corp., died February 1. Mr. Williams joined Ransome Machinery Company in 1923. He became product manager of the paver section in 1943 when Ransome became a division of Worthington.

Harry J. Kelly, who retired on December 31, 1951, as manager of construction and maintenance division of the manufacturing department of Gulf Oil Corp., died suddenly January 21. He had been with Gulf since 1916 and construction and maintenance division manager since January 1950.

Charles S. Ackley, secretary of McKiernan-Terry Corp., died December 16 after a brief illness at the age of 78. He had been associated with McKiernan-Terry and its predecessor companies for 43 years. He was one of the founders of Terry Core Drill Co., which merged with McKiernan Drill Co. to form McKiernan-Terry Drill Co. in 1910.

Manufacturers' addresses are listed on page 107

Aggregates (Light-weight)
Great Lakes Carbon Corp.,
Building Products Division

Air Entraining Agents
A. C. Horn Co.

Asphalt Plants (Portable)
Barber-Greene Co.
Iowa Mfg. Co.
White Mfg. Co.

Asphalt Tile
Coleman Floor Co.

Axles (Truck)
Eaton Mfg. Co., Axle Division

Backfillers
Bucyrus-Erie Co.
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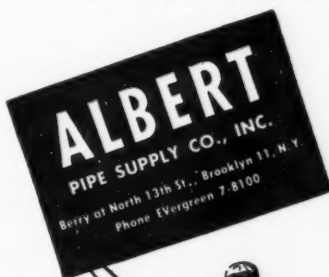
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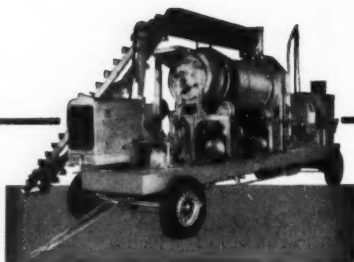
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INDEX OF ADVERTISERS

A.G.C. Forms and Reports	83
Adams, J. D., Manufacturing Co.	8
Aetna Casualty and Surety Co.	93
Albert Pipe Supply Co.	103
Allied Structural Steel Cos.	20
Allis-Chalmers Tractor Division	16,17
American Cyanamid Co.	51
American Surety Co.	82
American Tubular Elevator Co.	86
Austin-Western Co.	12
Barnes Manufacturing Co.	56
Bethlehem Steel Co.	67
Buda Co., The	77
C.I.T. Corp.	4
Caterpillar Tractor Co.	53
Ceco Steel Products Corp.	64
Central Surety and Insurance Corp.	96
Cleveland Trancher Co., The	95
Clyde Iron Works	Cover 4
Coleman Floor Co.	108
Concrete Surfacing Machinery Co., The	90
Construction Machinery Co.	84
Continental Motors Corp.	73
Contractors Pump Bureau	98
Cummins Engine Co.	29
Eaton Manufacturing Co., Axle Division	Cover 2
Economy Forms Corp.	80
Electric Tamping & Equipment Co.	89
Employers Mutuals of Wausau	75
Euclid Road Machinery Co.	Cover 3
Fidelity and Deposit Co.	105
Foster, L. B., Co.	25
Galion Iron Works & Mfg. Co., The	34
Gorman-Rupp Co., The	99
Gradall Division, Warner & Swasey	14
Great Lakes Carbon Corp.	100
Griffin Wellpoint Corp.	74
Horn, A. C., Co.	71
Insurance Co. of North America	30
International Harvester Co.	54,55
International Steel Co.	69
Iowa Manufacturing Co.	60,61
Irrington Farm & Tank Corp.	90
Kinneair Manufacturing Co., The	97
LeRoi Co.	44,45
LeTourneau, R. G., Inc.	36,37
Link-Belt Speeder Corp.	59
Lone Star Cement Corp.	2
Mack Trucks	46
Macomber, Inc.	6
Mahon, R. C., Co., The	33
Marquette Cement Manufacturing Co.	18
Michigan Power Shovel Co.	101
Mixer Manufacturers Bureau	104
National Surety Corp.	79
Naylor Pipe Co.	87
Northwest Engineering Co.	49
Phoenix-London Group	42
Riddell, W. A., Corp.	91
Ryerson, Joseph T., & Son, Inc.	1
Safway Steel Products, Inc.	72
Shunk Manufacturing Co.	80
Sixalkraft Co., The	88
Sloane, H. A., Associates	103
Supremix, Inc.	92
Symons Clamp and Mfg. Co.	94
Timken Roller Bearing Co., The	40
Trans-Global Co.	102
Trinity Division, General Portland Cement Co.	78
Truscon Steel Co.	10
United States Rubber Co.	81
Universal Atlas Cement Co.	26
Universal Form Clamp Co.	63
Universal Manufacturing Corp.	85
Vibro-Plus Products, Inc.	76
Wellman Engineering Co., The	43
White Manufacturing Co.	106
Wisconsin Motor Corp.	82
Wadack Electric Tool Corp.	108

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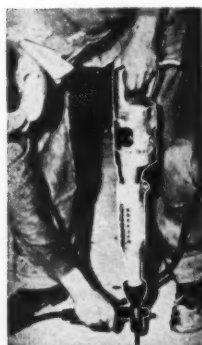
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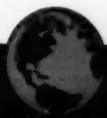
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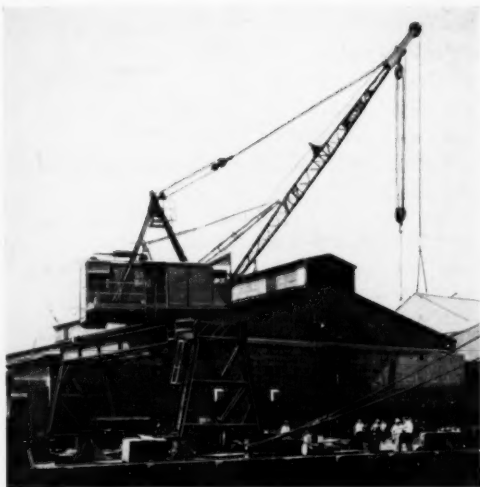
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